TEXT-BOOK TO KANT:

THE CRITIQUE OF PURE REASON.

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THE CRITIQUE OF PURE REASON:

ÆSTHETIC, CATEGORIES, SCHEMATISM.

TRANSLATION, REPRODUCTION, COMMENTARY, INDEX.

WITH

BIOGRAPHICAL SKETCH.

BY

JAMES HUTCHISON STIRLING, LL.D.,

FOREIGN MEMBER OF THE PHILOSOPHICAL SOCIETY OF BERLIN.

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PREFACE.

It may be desirable to premise a word in regard to the contents of this book, or even perhaps its name—"Text-book."

We all feel that an effect *must* have a cause: that is, there is assumed to be a *necessary connexion* between them. Still, we take it for granted, as well, that *matters of fact* (which any case of causality seems really to be) are always contingent and never necessary: their contraries, implying no contradiction, are to be acknowledged possible; as, for example, the sun rises and sets, but it might do neither. Hume, now, pointed out the discrepancy here, and asked,—The relation of cause and effect being matter of fact, why do we, inconsistently, assume it to be necessary? Kant, again, who took the question to himself, answered,—It is to understate the question, to confine it to causality; substance and accident, action and re-action, are as necessarily connected as a cause and its effect; and the entire interest, rather, relates to *a general system*—a general system of necessary connexion, necessary synthesis, or say synthetic necessity, *even in matters of fact.*

This system, now,—while it is all that, properly

and peculiarly, is *constitutive* either *of* or *with* Kant (anything else, unless *the categorical imperative*, being either only negative and *regulative*, or simply a corollary),—is what is here exhibited, with the fullest details, and in no less than a threefold form. For such reason (indicated) it is, then, that this book is named, *Text-book to Kant.*

The *Translation* has been executed with every care; and notes have been added in explanation or correction of the text. Existing translations have neither been now referred to, nor at any time, indeed, either used or read (those principally in vogue, however, having years ago been sufficiently consulted, legitimately to warrant a general judgment).

It has been the aim of the *Commentary* to leave as few obstacles as possible between the reader and a full understanding of *the transcendental system* of Kant. Perhaps the very word *transcendental* may henceforth carry, in general, a somewhat saner sense than seems currently in use at present.

In supplement both of translation and commentary (which, reasonably, are based on the second edition[1]), pertinent extracts will be found to have been made from the first edition of the *Critique of Pure Reason*, as also from the *Prolegomena*, early pen-in-hand summaries, etc.

In the *Index* there has been a very special endea-

[1] The special text that underlies this volume is (what is most generally found here) that of Kant's collected works at the hands of Rosenkranz and Schubert: the other edition, Hartenstein's, I do not happen to have seen. I had a little old *Graetz* reprint (1795) of the second edition of the K. of P. R. beside me as well.

vour to provide the reader with a complete referential guide.

The *Reproduction*, that, by way of introduction, precedes the translation, will be found to cover the whole ground occupied by the rest of the book. Executed in 1862, it is all that exists of the "Exposition of Kant" which is several times mentioned in the *Secret of Hegel* as prior to that work. Perhaps some of my friendly correspondents will—so far in response to their wishes—be pleased to see this exposition at last. I only regret, as I write this, that Mr Lewes, who was one of the most earnest of these, is not now alive to honour it with his perusal. It is the continued interest in Kant, as well as my recent, somewhat intimate occupation with the subject, that has led to publication at length.

In the *Biographical Sketch*, taking a day as usually spent by Kant, and filling into the distribution of it salient, characteristic expressions of his gathered from his whole works, some little has been attempted, as well in indication of the man, as of the peculiarity of his modes and subjects of thought generally.

Biographical Sketch.

BIOGRAPHICAL SKETCH.

It is five o'clock of a winter's morning in the year 179–, and, prompt to the minute, a stiff, erect, old-soldier of a servant briskly throws up the door of a small sleeping-room,—where never the sun shone, nor a fire entered,—with the words, "Herr Professor, die Zeit ist angekommen!" Nor does the Professor addressed neglect the call. Sitting up at once, he considerately divests himself of the carefully-calculated appliances of the night. The Professor is Kant, the caller his inexorable old servant Lampe, and the scene the philosopher's simple bed-closet, in his simple dwelling-house, in the remote and winter-dismal Kœnigsberg.

Once dressed, the Professor smokes his one daily pipe of tobacco, and (without eating) drinks his two daily cups of tea. Were it a matter of choice with him, he would prefer coffee; but he finds it heating, and he relinquishes it. Neither is it as a matter of sense that he inhales the fragrance of the weed at this so early morning-hour. No; that to him is the pain and penalty of a nauseous and confusing duty. He is but a little man, the Herr Professor, hardly more than five feet in height, small-boned, fleshless, meagre, thin, evanescent as a shadow; and these awkwardly gulped tobacco-fumes are but the medicinal nauseant with which philosophy would clear and cleanse the *mala pituita* from its poor, sunken, narrow, little chest. Not, however, that, in this case, to be always frail is ever to be actually ill. Against that, plainly, there are subtler expedients in use than even the matutinal nauseant; for there is a cheerful red on the cheek, there is an alert eye in the head of the little philosopher. Blue, loving, and true, those eyes of his at once touch all men irresistibly into affection and respect. Not large, the head is handsome

enough; and the face under it has the look in it somehow of a simple, garrulous, half-arch, old-maidenish man.

His pipe ended and his tea swallowed, Kant now prepares himself for his seven o'clock lecture—seven o'clock under the murky lights of oil or tallow in the remote, cold, dark, wintry Kœnigsberg! Ah, but his students listen to him, for they know him. They know his honest, loyal, absolutely *true* nature—an absolutely true nature that is conscientiousness itself. With all his gifts and solid acquirements, too, they know him to be the most modest and retiring of mortals, and yet the man who could declare, with his heart on his lips, that "did any man propose to him, even in his last moments, a good action, him he would thank."

They see him there, and they cannot choose but listen, though they must even strain the ear to catch the low voice with which he seems to think before them. He tells them this morning, in that honest ramble of unaffected talk, of the faculties by which logic is realized, and of the hostile influences to which they may be exposed.

If we consider our cognitions, he says, in regard of the two essentially different faculties (sense and understanding) from which they derive, we come upon the distinction between perceptions and notions (*Anschauungen* and *Begriffe*). Sense brings forward the mere stuff or material for thinking; it is understanding disposes it and redacts it under rules or notions; for in every cognition there must be distinguished *matter* and *form*. The distinction between æsthetic and logical cognition is identical with that between perception and notion, intuition and discourse. Symbolical cognition is not opposed to intuitive cognition (cognition through *sinnliche Anschauungen*), but to intellectual or discursive cognition (cognition through *Begriffe*). Reflection is the internal act (spontaneity) that realizes a *Begriff*, a *Gedanke;* but apprehension, again, is that other internal act (receptivity) that realizes a *Wahrnehmung*, an *empirische Anschauung*. Our Ego has a certain duplicity: internal sense depends on an *a posteriori* perceptive complex; apperception, true self-consciousness, is but a reflection, a thought, a logical point, and devoid, consequently, of all matter of contents: the one is not the other; reflection is not apprehension, nor this that. The one is pure, the other em-

pirical, etc. It is not to be supposed, however, that the Ego itself changes and differs as its states happen to change and differ; for it is only by reference to *its* identity that *their* difference is recognised. A sound understanding, a practised judgment, a comprehensive reason, constitute the entire compass of the intellect. The servant, under formal orders, need only understand; the agent of a special duty, with merely general directions to guide him, can but judge; but the chief, who has to anticipate cases and find the rule for them, must reason. He who is deficient in wit is an *obtusum caput*, a *stumpfe Kopf*, a blockhead. Deficiency of judgment, but *with* wit, is *stultitia*, *insulsitas*, *Albernheit*, silliness, scatterbrainedness; *without* wit, it is *stupiditas*, *Dummheit*, what characterizes the dolt. He who is incapable of learning, or into whom nothing can be got,—he, like an untempered blade, is *hebes*, dull, *einfältig*, a dunce. He who can only imitate is a *Pinsel*, a shallowpate; while he who can originate is a *Kopf*. He who sacrifices the substantial for the unsubstantial, as home-comfort for glitter abroad, is a *Thor*, a fool; but the *Thor* that is offensive is a *Narr*, a beast.[1]

His lecture over, Kant now returns to his abode, and occupies himself with his studies till it wants a quarter of one. Warned by his housekeeper, he then springs up with alacrity, and hastens to deposit on the dining-table, for his own consumption at a prescribed moment, a small glass of rum carefully covered with paper. That effected, he dresses for dinner. This, in the twenty-four hours, is his only meal; and he eats it largely (for him), and with enjoyment. It usually consists of three dishes with dessert and two bottles of wine. Kant, now, like the wise man he is, throws off the harness of the intellect, and dons the lounging-coat of the body. But he will not, like a mere brute, only crunch his bones in solitude; he has always at least two, and sometimes five, to dine with him. He will have a rational zest to his meal in the company and discourse of his fellows.

Once at table, Kant directly sets himself to put his guests at their ease: he even salutes or rallies them in the homely provincial of the district. Kant is only a Professor; but he has lived in the houses of the distinguished: he feels up to a

[1] Kant fills whole pages, in work after work, with distinctions like these.

thing or two; he will be quite the man of the world, and not a *cuistre*. The discourse at table must be light, then, and such as gently to entertain and stimulate. Kant has his own expedients, indeed, for keeping the ball up; for he hates the mortal agony of a pause. Is it not curious, he remarks, that *poltroon* should be only a contraction consisting of the first syllables of the words *pollex truncatus?* Or he resorts to a mild conundrum and asks, Why a woman ought to be at once like and unlike the town-clock or a snail? Like, to be sure, as correct to the minute; but unlike, as not proclaiming everything that happens. Like, again, as keeping to a house of her own; but unlike, as never carrying her all on her back! The French feel beauty, he points out again; but it is the English who are open to the sublime. And is it not strange that, whereas the French commonly like the English, the English, on the contrary, as commonly despise the French. But it is the commercial spirit does this, and not possibly the mere rivalry of neighbours, as England is quite well aware of its own indisputable superiority.

And here now the thought of other nations suggests physical geography to him. He cannot help referring to some of the most interesting facts that have reached him. There is such a thing as a milk-white sea, he says; you have that at the Moluccas. The English and Scotch differ from the Highlanders, as being very delicately brought up! Negroes are born white, all to a ring round the navel. The ibis dies the moment it quits Egypt. The lion is so noble, he will not put a paw upon a woman. He is not afraid of the crowing of a cock, but he runs away from a snake or a fire. The marrow of his bones, when dried in the sun, is so hard that you may strike a light with it. The water at the Cape is so pure that it remains sweet when brought to Europe. If you make a cup of the rhinoceros's horn, any poison will splinter it. A tree in Congo has its leaves and its bark both poisonous, but the one is the antidote to the other, take which you will first. In the Canary Islands there is the tree of life that never rots, whether in the ground or in water. There is a mussel in Italy that gives out so much light, you can see to read by it. In Languedoc there is a hot spring that hatches eggs, but its water on the fire comes much slower a-boil than ordinary

water. A petrifying spring at Clermont has actually made an ordinary stone-bridge over a river. Wild beasts only eat Negroes in Gambia, and leave Europeans alone. The Negroes in America are immensely fond of dog's flesh, and all the dogs bark at them.[1]

By-and-by Kant takes an opportunity to tell his guests what he knows about Swedenborg. In the end of the year 1761 Swedenborg was called to a certain Princess whose great good sense and excellent understanding made it all but impossible for her to be deceived. She had heard many strange things told of the visions of the man, and wanted to convince herself of the truth of the matter by a trial of her own. Swedenborg came to her, and, after they had conversed together for some time, she commissioned him to deliver a secret message to the spirit of one of her departed friends. In a few days Swedenborg was once more ushered into her presence. The lady said, Well? and Swedenborg, stooping, whispered into her ear a word or two which drove the blood from her face and chilled her to the marrow. What he had whispered was true, she said, and it could have been communicated to him only by the dead.

Madame Hauteville, widow of an Envoyé from Holland to the Court of Stockholm, was summoned, some time after the death of her husband, to pay an account to the goldsmith Croon, which she was morally convinced a man of her late husband's punctual and orderly ways must already long ago have settled. The sum concerned was a considerable one, and in the trouble and anxiety of the circumstances she was induced to speak to Swedenborg, who happened to be then at home. Swedenborg cheerfully undertook to carry a message to her dead husband, and bring her his answer on the point. Accordingly, three days afterwards, he presented himself at Madame Hauteville's, when it chanced that she was entertaining company. In his cold way he announced to the lady that he had seen and spoken with her departed husband, who assured him that the money had been paid, and that the receipt was then lying in a certain desk. Hereupon the lady exclaimed that that very desk had been com-

[1] Almost an infinite number of such stories are to be found in Kant, and all gravely propounded!

pletely cleared out and its contents thoroughly overhauled and carefully examined, but that not a vestige of any such paper had been discovered. Yes, said Swedenborg, but your husband intimates that, if you take out a certain drawer on the left side, you will see a board, which you must push away, and then you will find a concealed shelf with the Secret Despatches of the Government on it, and beside them the receipt of Croon for payment of the plate. At these words of Swedenborg's the widow ascended to the room where the desk in question lay, followed by her whole company, in whose presence all proved itself to be exactly as Swedenborg had described.

There is the story, too, of how Swedenborg, when at Gothenburg, saw the conflagration that was then raging at Stockholm (some two hundred and fifty miles off, and with the whole breadth of Sweden between them), and threatening his own dwelling-house there, and of how, after watching it for some hours, he became composed at last, and said the fire had stopped at such and such a building: all which, too, proved itself true. In fact, the friend from whom the last statement directly came knew intimately all the best people in Gothenburg, and he spent two months there directly investigating a matter that was then recent. While, as for the first statement, it was communicated by a personal friend, who had been directly present to the whole transaction.[1]

Turning to science now, Kant tells his guests of his fancies about the construction of the universe. He shows them, too, how, in process of time, the resistance of the tides must bring the rotation of the Earth to a stop, with consequent destruction of the planet. Many evolutions and revolutions, he continues,—petrifactions, crystallizations, organizations,—must have preceded the advent of man. The thought of an affinity in things such that, in consequence of it, they must have originated either, genus after genus, from a single primitive one, or, as it were, from a single generative mother's lap, leads to ideas so monstrous that reason shudders back from them.[2]

There is a wonderful power in the mind to master the body,

[1] Kant actually heaps a number of circumstantial particulars together which almost seem to authenticate these wonderful stories.

[2] The anticipations, as above, of Herschel and Laplace, of Thomson and Tait, are known to everybody; but not so that assonance, let it be

is the next remark, and Kant expatiates on all his thousand and one little theories about health and disease. The plan, on the whole, is, he says, not to disturb nature; for the shortest-lived are just those who are for ever striving to set death at defiance.

Health and the duty to one's self suggesting to Kant the question of temperance, he cannot help exclaiming that a man in a state of drunkenness is only a beast: the false happiness and spurious freedom from care which result from artificial stimulants can only end in that manner. And yet, something is to be said on the other side; for how wine, short of intoxication, promotes good fellowship and open-hearted free communication between man and man—nay, how it has even the merit to foster virtue itself! Did not old Cato himself, according to Cicero and Horace, feed the flame of his integrity with wine? Hume, too, liked his bottle of port with his rubber of whist; and he actually execrates the guest who cannot forget in the morning the events of the night. It is remarked of women, priests, and Jews, that they do not get drunk; for people believe in them from the outside. Ah, one might marry were it not for that wart on the nose or that gap in the teeth!

But now the sitting has almost reached the very extremest limit that Kant endures, and, to the satisfaction of all, the company breaks up and departs. Kant, too, sallies out for his walk. Day after day it is over the same ground, and at a certain part of it he must pay toll to certain beggars, whom his own benevolence has gathered for him. Past the beggars, Kant can resign himself to the course of his own thoughts. The sight of his legs, as he walks, suggests to him his own oft-repeated original observation that white stockings do more justice to one's calves than black ones. And, so, what a thing is seeming! How often does not studied obscurity that plays the part of depth obtain the credit it seeks! But to save

of what force it may, to Darwin. Here, too, is a curious anticipation of Bulwer. Did we take up at nights the threads of our dreams where we left them off when we awoke, it is possible that we should come to think we lived in two different worlds. And this concerning one novel, we may refer to another such. Kant's milk-white sea, as lately mentioned, reappears in *The Green Hand*.

the ship we must give the whale a barrel to play with. It does not do to be bashful, or put a great weight on what folks think of us. Just to fancy now that Hume—the fine and gentle Hume—was a great four-square man, and yet was bashful, or, in his own language, *blaet* (our *blöde*)! he speaks very meaningly of the horror that attends the break-down of the first attempt to speak with the due assurance.[1] The season suggests now that the South Pole is colder than the North Pole: there is more land north, and the sun remains there in summer eight days longer. Strange, how, in northern latitudes, though no wood grows, there is plenty drifted. In Siberia they consider the devil only; in Heaven, they say, God is too far off; but it is the devil rules here. The vulgarest smut or the stupidest practical joke will be hailed by the common man with quite as much joy as Kepler may have felt over some discovery his share in which he would not have exchanged for an entire principality. The smallest insect that springs pushes the earth back. A dog is old when a man is scarcely out of his boyhood; and the cedars of Lebanon are but middle-aged when its firs have long since perished. Perhaps five or six thousand years are but a day in the life of the earth. Possibly, therefore, the earth was several thousand years in existence before any life appeared on it. No chance, however, or mere physical cause can produce an organism: give me all the matter in the world, and I could not make a caterpillar. There are certainly provisions, at the same time, in view of new conditions: birds get additional feathers when transferred to colder climates. But *quælibet natura est conservatrix sui.* America, at its hottest, cannot grow a Negro, or even a Hindoo, of its own. What should show the origin of plants and animals would be a science for the gods who were there at the time. How it darkens! Ah, day is beautiful, but night is sublime. Yes, the English—that is what newspapers do: it is scarcely possible that there can be any nation where understanding is so universal, even among the lowest classes, as is the case with England.[2]

Returning from his walk, Kant now seats himself for the

[1] Of course Kant is not responsible for the etymology here.

[2] These *propos* are rather miscellaneous, perhaps, but there are thousands of others the like, in which Kant was pleased to indulge himself.

evening by the stove in his room; and, fixing his eye on the point of a church-spire which he sees out of window, he runs over in mind—what was his *work*—his System.

I am so far from considering metaphysic worthless or unnecessary, he thinks, that, on the contrary, ever since I have seen into its nature and the place proper to it in the circle of our knowledge, I am convinced that even the true and eternal weal of the human race depends upon it—an estimate that may appear to everybody else extravagant and wild. But it comes to this, one ought to ask: 1. Am I right in my distinction between analytic and synthetic judgments, as well as in my statement of the nature and value of the latter when *a priori*—that they constitute, namely, the foundation of metaphysic? 2. If it be true that we cannot synthetically decide upon anything *a priori*, unless in reference to such formal conditions, whether with regard to perceptions of sense or notions of the understanding, as *precede* experience, and render it *possible*—such experience as this of ours, that is? 3. Whether, therefore, finally, all speculative cognition *a priori* possible for us, though granting necessary existence to unknown things in themselves (*noumena*), avails to reach only *phenomena*, mere appearance to sense, and in this way leaves room for a natural dialectic, which, being understood and seen into, we are immediately at home as regards the true nature and limits at once of our knowledge and hopes?[1]

For, any cognition, to deserve the name metaphysical, cannot be *a posteriori* (matter of fact, then, and, consequently, contingent), but must be *a priori*. Now, there is only sense and understanding; and the former being the special seat of the *a posteriori*, it must be the faculties of the understanding alone that can concern the *a priori*. That is, our faculties themselves will contribute to experience, even as we receive it through sense, certain elements of their own. But a notion alone never gives an actual or real cognition. We may conceive centaurs, harpies, gorgons, chimæras, and fancy all manner of new principles or new senses; still these are but notions and empty—they give no knowledge. Suppose we have at any time a notion only, what is it we usually do to

[1] Only the above paragraph has actual words of Kant in regard: what follows is equally true to Kant, but only to be named *reproduction*.

realize it? We turn to experience, we turn to the object of it, we *try* this object, to which the notion itself is due; and, in this way, learning fact after fact, we *fill* the notion and convert it into a reality. But, this being, it would appear that, in the case of *a priori* notions, it must, once for all, be quite impossible to attain to any *a priori* knowledge that shall be worthy of the name. *A priori*, there is no turning to experience, to special sense, possible. Let us, then, have even an infinitude of *a priori* notions, they must, as mere notions, and without filling, prove worthless—mere possible fancies, dreams, not positive cognitions, realities. That is what the want of the special senses brings about for us. If we have *a priori* notions, it is an indispensable necessity that we should have a medium of sense to apply to for such material as shall impregnate them with meaning—give them *sense*, as we say—render them objectively real. But can a medium of sense be, by any possibility, *a priori?* Why, sense is precisely what is *a posteriori*. Sense and the *a posteriori* are, in fact, convertible terms; they are identical. Each is the other; the latter is the former, and the former the latter. It is manifestly impossible and absurd—an actual contradiction in terms—to speak of an *a priori* sense. And without it, any other *a priori*—even if true—must be and can only be a mere meaningless region of impalpable ghosts —*domos vacuas et inania regna*.

But we have spoken of the possibility of the faculties themselves contributing elements to, so to speak, the *bolus* of experience; why, then, should we not suppose this of the faculty of sense? It is true that each of the five special senses yields, in odours, savours, colours, etc., only what is simply the *a posteriori* proper. Each odour, savour, colour, what not, is a mere sensation, a mere feeling, subjective affection, that has to be waited for—something, consequently, that can only be *a posteriori*. Still, are there no general forms which may be common to them all, and, as common to them all, only possibly due to the very machinery of sense itself as machinery? May not what we may call *general* sense, namely, have forms of its own, actual sensuous forms,—even, so to speak, actual *material* forms? In sense, besides the mere feelings contributed by the sensations, there is such a thing as perception. We do not only

feel in sense, but we also perceive—that is, we discern a manifold, a complex of units, which units we set together into the one object, and can even count. Now, that in sense that holds of *perception*, let *sensation* be as it will, may possess actual *a priori* forms, actual *a priori* objective forms—forms, that is, which add themselves objectively, even as objective units, namely, to the other units of the manifold or complex that is to be the object perceived. Any such forms must be absolutely general, and alone absolutely general: are there any such? Why, all things whatever—that is, all special sensations whatever—are in time and space. If we want absolutely general forms, surely these are they. They are absolutely universal, absolutely unexceptive, absolutely necessary, absolutely infinite; and there are no others. But time and space are themselves perceptible manifolds: time is a series of perceptibly succeeding moments; space, though infinite, is as a stereoscopic whole of length, breadth, and thickness —it is a perfect aggregate of discernible units. Here, then, is a perceptive, a sensuous matter, with which we may, in two different ways, fill notions. As *a priori*, too, it is in a position to fill *a priori* notions. After all, then, it is only these latter we want now—accepting, as we do at once, time and space as a perfectly satisfactory medium of *a priori* sense. Well, then, it is logic shall yield us the *a priori* notions. Logic is an established pure science, complete in all its parts, and as *pure* (in that it relates to the mind only), it is also perfectly *a priori*. This science, in its classification of judgments, now, under quantity, quality, relation, and modality, yields us at once the entire *a priori* tree of the pure functions of judgment; and judgment is identical with the understanding, judgment is identical with apperception, judgment is identical with consciousness, with what I call the Ego, my self.

Here, now, then, are all our difficulties removed, and the way completely cleared for us. A notion to have reality, meaning, or, as we say, *sense*, must have a sensible complex filled into it; but then, again, a sensible complex, if to have connexion, unity, objectivity, must have a notion into which it may collapse, and become henceforth a one perceived or experienced entity. These stones, and edges of lime, and all the angles and colours in them, are but a disjunct, unintelligible chaos

until I have fused them all together into the single articulate entity and identity I call *wall.* Wall, now, is a perfectly general notion, though, of course, empirical or *a posteriori* in origin. Wall, too, though a notion, has become, as in amalgamation with those sensuous materials, actually *perceptive.* The manifold of *sensation* not more than the unity of *notion,* mediates the *perception.* And this is general. There never can be formed perception, finished perception, unless a notion has added itself to the sensation; though, of course, there may be conceived consciousness of the units of what we may call crude objectivity (time and space) without the help of a notion; but that we should name crude perception, perception as perception, and, in that sense, perception *proper.*

Now, with such considerations before us, it is easy to see that, possessing *a priori* notions and *a priori* matter of sense, we possess, also, all the ingredients necessary for the construction of *a priori* objects. These *a priori* objects we shall call *schemata;* and the schemata, as resulting from the *a priori* action of *a priori* function (notions, the categories) on *a priori* affection (general sense, time and space), will prove so many checkers for reception into objectivity and necessity of the mere subjective contingency of our special senses in their various sensations; which, as such, are always, evidently, our own states, our own mere feelings.

And here we see the answer to Hume as regards the question of causality. What is the reason, he asked, of the necessary connexion we attribute to all actual examples of it? Now, he, for his part, assured that he had only matters of fact before him, could fall on no *rationale* but reference to natural instinct on custom. We, for our parts, again, assured of the presence of necessity of synthesis between elements that are absolutely alien the one to the other, have become awake to this, that the *rationale* desiderated cannot, as Hume supposed, lie in any element of experience, but must be sought for in a source that is absolutely (not relatively) *a priori.* The answer, in fact, is this. The nexus of antecedent and consequent is a function of judgment, a function of apperception, an *a priori* notion, and its action on a certain *modus* of time is such as to determine this modus into a *schema,* a *species,* a *simulacrum* of the law of causality, which, reflected into all

actual cases of cause and effect, insinuates into these that apodictic necessity which we predicate of them.

But it is now ten o'clock, and the inexorable Lampe appears to put his master to bed. Kant, as his principles are, can only obey. In the little sunless, fireless bed-closet which we have already seen, he lays him down on his little bed accurately adjusted to a prescribed angle—he lays him down and in a carefully calculated position which he stoically preserves. Lampe covers him up, and wraps him in, on those strictly scientific principles which have been laid down for him. The philosopher is then left to his well-won repose. This he pursues, like everything else, steadily. His lips are firmly closed, and he breathes through his nostrils only.[1] Then his thoughts, they, too, must only wander in an authorized tract. He "shuts his eyes" (as his phrase is) to any too importunate thought, so that gradually such confusion of the ideas springs as is akin to dream. With realization of all these subtle calculations and appliances, then, it is not wonderful that—after due work, exercise, relaxation, and with his single meal now, perhaps, even perfectly assimilated—the wise little body, that allows itself only seven hours of sleep, should fall gently into the most natural and healthiest of slumbers—slumbers that are only disturbed at five o'clock of the following morning by the inexorable Lampe in the way we have seen. Such now has been for years, and will remain for years, the philosopher's daily course of life.

Immanuel Kant was born at Kœnigsberg, April 22, 1724, and died there February 12, 1804. His parents were pious, respectable people in humble life; his father a saddler of the name of Cant, and by descent Scotch. It was Immanuel himself made the name Kant, in order to preclude the pronunciation *Zant*. His course in life was, on the whole, the usual one of a German student who would provide for himself by the pursuit of letters. He had the usual training at school

[1] Talk of the anticipation of Laplace or of Thomson, why here is another, even more curious than of Bulwer and the *Green Hand*. Mr Catlin startled the whole kingdom the other day by the recommendation to keep our mouths shut. And Kant knew it all, and practised it all a hundred years ago!

and college. At the usual years, he was the usual house-tutor. It was only later than usual, however, that he seems to have qualified himself as the usual university teacher; and he was no less than forty-six years of age when he came into port at last as a Professor. As teacher and professor—and he was eminently successful as either—he wrote many works, of which the principal ones are these: First of all, the works which are his *work*, the Three Great Kritiken, namely; to which his Prolegomena, his works on Morals and Law, his Metaphysic of Nature, and his Strife of the Faculties may be regarded as only supplementary. The Anthropology is very interesting, and the Logic must be read. His Religion within the Limits of Pure Reason has been widely influential, and is the respective corollary to his philosophy. The student has much to gain also by a perusal of his shorter essays, as his review of Herder, his Progress of Metaphysic, On Philosophy, etc. In fact, no one writing of Kant that appeared after 1781 can well be neglected. Before that date, too, there are many interesting papers—but they are all to be found named in their order in a very useful chronological table at page 211 of the eleventh volume of the Works.

It is now—1881—exactly a hundred years since the publication of the first great Kritik; and there can be no doubt that, at this moment, the place of Kant, as generally estimated, is that of greatest German philosopher, greatest modern philosopher, greatest philosopher at all with only the usual exceptions of Plato and Aristotle. Nor can there be any doubt that a like estimate will continue for some considerable time yet. Kant, in truth, was a man of a supremely active, tenacious faculty. One might almost say that the drawing of distinctions lay in his very blood. But it must be said, too, that, in the sort of elephantine simplicity and *naïveté* of his countrymen, another of his characteristics is superfetation. In common with them, namely, he has the distinct drawback of seeing so very deeply through the millstone as actually to witness the gnomes of the universe at work. His reading had, evidently, been wide and general, but not, perhaps, precisely deep. His character as a man has been already, to some extent, depicted. In that respect, and every other respect, he was, and always will be—*der ehrliche Kant.*

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Introduction.

State of the question: Descartes, Leibnitz, Locke, Hume. The general problem. The necessary conditions of its solution, and consequent distribution of the whole inquiry.

Descartes, as Leibnitz after him, held by innate ideas. Locke controverted the term *innate*, and assumed, as well, all our *ideas* to originate in the *sensation* or *reflection* of *experience*. For even reflection was to him but the mind's own *further* experience in manipulating the experience that was already due to sensation. If sensation were *external sense*, then, said Locke, reflection "might properly enough be called *internal sense*." "When," from these sources, "the understanding is once stored with simple ideas, it has the power to repeat, compare, and unite them, even to an almost infinite variety, and so can make at pleasure new complex ideas; but it is not in the power of the most exalted wit, or enlarged understanding, by any quickness or variety of thought, to invent or frame one new simple idea in the mind, not taken in by the ways aforementioned." Hume now, on the one hand, only accentuated these positions; but, on the other, he drew from them their natural consequences — consequences which Locke, for his part, had been so far from foreseeing that he had

even reasoned, in excess of his principles, to their very opposites. It is part of these proceedings of Hume which we have now, in the first place, to see.

The word *idea* with Locke is the *Vorstellung* of the Germans. It is "the most general expression for all that is present to mental consciousness;" and it is quite as applicable to the products of sensation as to those of reflection. Hume altered this. He discriminated between these products,—naming the former *impressions*, and only the latter *ideas*. Impressions (*Enquiry*, sec. ii.) are "all our more lively *perceptions*, when we *hear*, or *see*, or *feel*, or *love*, or *hate*, or *desire*, or *will:*" ideas "are the less lively *perceptions* of which we are *conscious* when we *reflect* on any of those sensations or movements." It is important to observe that what we generally call *feelings* (love, hate, desire, etc.) are here ranked with *sensations* as equally impressions. Hume will regard *sense* as but a single function—from whatever side, whether *ab intra* or *ab extra*. Or there is to Hume, just as there was for Locke, an *internal* as well as an *external* sense; the former, moreover, even as a sense, being quite on a par with the latter. It seems to be his belief, namely, —and a belief, as seen, apparently shared by Locke,— that, to a being like man, an internal sense, calculated to take note of the successive empirical states of the inner subject, is as necessary as an external sense which shall bear to refer to an outer object. In which case, too, it must be seen that inner sense is, as a sense, to be strictly distinguished from self-consciousness, or the apperception of the ego. The contents of the former are all the transient states of the empirical subject when under sensuous feeling; whereas those of the latter are but the simple *I*, a mere intellectual act, the bare thought *I*, *I*, *I*, or *I that am here*

and now thinking (*das "ich denke"*). It is also important to observe further that, by the term *impression*, Hume means only the mental *state*, and as simply *felt*, without reference to any supposed *impressing* stimulus: it means simply—with total suppression of the consideration of an agent — any cognised affection of sense, inward or outward, as such.

We may state the chief points in the modified position thus: 1, Sensation is the source of all elements of knowledge; 2, There is internal as well as external sensation; 3, Sensation externally is not more product of a sense than sensation internally; 4, What to us are the ideas of our thoughts, are, in reality, only copies of our sensible impressions. To these we may add, 5, That, for knowledge, we are shut in to our own subjective states of affection or impression: "nothing can ever be present to the mind but an image or perception—*this house* and *that tree* are nothing but perceptions in the mind" (*Enquiry*, sec. xii. part i.)

And now the *consequences* of the general theory become all too manifest. If all our ideas are only copies of our impressions, then we know nothing whatever that, substantially, is not the product of *sensible experience*. But we have no sensible experience of the hidden principles of things—we have no sensible experience, indeed, of the actual things themselves; for, by the very terms of it, sensible experience is but a consciousness of affection—affection set up in us we know not how: it is but a subjective *feeling* (light, sound, fragrance, etc.), and it is impossible to pass beyond it. Further, we have no sensible experience of God, or of the immortality of the soul, or (strictly) of the freedom of the will. That is, the whole business of meta-

physic—metaphysic proper, metaphysic with its forecourt of ontology—is summarily sisted.

But what, in that case, of experience itself? And here Hume is at once struck by the extraordinary fact that the authority of experience depends on causality, while that of causality, again, depends on experience—a circle of support which, of course, lies only in the air. These findings Hume subjects, as he believes, to a most searching scrutiny, and with no other result than—instinct apart, and so far as any intelligible principle is concerned — a relegation of the whole authority of both causality and experience to habit or custom. Two matters of fact that we have been in the habit of seeing together mutually suggest each other; and thus the terms in the whole series of experience, which we implicitly believe strung on a necessary and universal law, are really combined and held together — accreted or agglutinated, as it were—by nothing whatever but that mere customary or habitual suggestion which, in all cases, follows the simple frequency of association. A few quotations will make clear the nature and process of Hume's thought here.

(I omit the quotations, and simply extract the following passage from article, "Philosophy of Causality: Hume and Kant," page 186):—

"Hume's proceedings are these. His first reference is to this, that neither generally nor specially is causation a quality. It is impossible to point to any 'one quality which universally belongs to all beings, and gives them a title to that denomination' (cause). Equally impossible is it to find in any particular cause any particular quality by which it is the cause it is. 'No object ever discovers, by the qualities which appear to the senses, either the causes which produced it, or the effects which will arise from it.' But if causality

be not a quality, it can only be a relation. And this relation examined, we find all that is representative of it to be only the *conjunction* in time and place of the cause with the effect. We do assume, and no doubt rightly, this *conjunction* to be a *necessary connexion;* but no minutest investigation can demonstrate to the understanding the ground or reason of this *necessary* connexion. Depending on a matter of fact, this reason is no affair of either intuition or demonstration; but, even as a matter of fact, this reason is not capable of being seen and understood, whether before production of the effect, or even after deliberate observation of that event. *Impression* as the original from which the *idea* of necessary connexion is copied, there is none to be found, unless simply *custom* from *reptition* of the *association.* If besides custom there is anything else to be taken into account, it is that reflection of vivacity from present impression to idea of absent object which is called *belief.* I hear a voice from the next room. That voice has always been conjoined in the past with a certain person. The custom of that conjunction suggests this person as the cause of this voice. The actual impression of this voice reflects its own vivacity to the person suggested. This person, suggested with all this reflected vivacity, is believed in; or belief in the actual existence of this person, suggested by the voice through customary conjunction, is reflected into the mind from the vivacity of the actual impression. *Nature,* it is true, attributes to causality a tie of necessity; but *philosophy,* for its part, can find no representative for that tie but the mere custom of repeated mental association. The tie ascribed by nature to causes and effects themselves cannot be found, so far as philosophy goes, to lie in them, but in us. It is only 'so far as causation is a *natural* relation, and produces a union among our ideas, that we are able to reason upon it, or draw any inference from it:' 'we infer a cause immediately from its effect; and this inference is not only a true species of reasoning, but the strongest of all others.' Nevertheless, 'as a *philosophical* relation,' causation implies only 'contiguity, succession, and constant conjunction.' Hume's whole theory, point by point, is contained in what has just been said; and the reader will have no difficulty in verifying this, whether from the *Treatise* or the *Enquiry.*

"It is Hume's own object to refer our belief in causality to instinct. A principle so necessary to us he openly vindicates for infallible nature as against our fallible faculties. But this was for Beattie and others precisely their own conclusion. Causality was to them, too, an implanted first principle, an instinct; and when they advanced as much as against Hume, they advanced only what Hume himself similarly advanced. Instinct here, in fact, was rather the sceptic's than the dogmatist's affair."

But now is there no reply to Hume? The word *instinct*, as we see, is none such. But again, whether on the one side or the other, to announce this instinct as the conclusion, is, in all cases, to leave the original difficulty precisely where it was. Let it be a fact that we *cannot but* think the A B of causality as necessary; is it, then, to explain this fact, simply to *name* it—call it instinct? Is it not still true to say that there is here a mental inference which defies philosophy to account for it?

This, at all events, we assume, for our part, to be the state of the question; and it now belongs to us to ask, Is it final? Is it to be confessed at last that there are no such things as *fixed principles* in human knowledge? This the result to which alone he seemed to labour, surely it is to be said that Hume himself hoped against it. "Metaphysics and morals," he directly says, "form the most considerable branches of science; mathematics and natural philosophy are not half so valuable." It is he himself, too, assures us that "the motive of blind despair can never reasonably have place in the sciences, since, however unsuccessful former attempts may have proved, there is still room to hope that the industry, good fortune, or improved sagacity of succeeding generations may reach discoveries unknown to former ages. . . . . The like has been performed with regard to other parts of nature;

and there is no room to despair of equal success in our inquiries concerning the mental powers and œconomy, if prosecuted with equal capacity and caution." These last words are suggested by reflection on the science of astronomy and the extraordinary perfection to which it has been brought by the genius of a single thinker, Newton alone. And, certainly, that is to be said, that such inquiries as lie now before us have never yet been guided into the highway of science. In that there is no bringing of the collaborators to agreement: the one thinks he has hit the road here, the other there; and follow which we will, we are presently at a loss. It is not so with logic, nor mathematics, nor, since Bacon, Galilei, Torricelli, and Stahl, with natural philosophy. These, in that they have reached, each its own open highway, are now sciences, and need only move onward. Nor is it difficult to find the reason of this. The men we have named, with others the like, "comprehended at last that reason only gets to understand what she herself planfully creates; that she must precede, consequently, with principles of her judgment according to constant laws, and actually compel nature to answer her inquiries." Metaphysic, as said, "has not as yet had the same good fortune, nor hit the highway; not but that she is older than all the other sciences, and would remain even if these were bodily swallowed up in the maw of an all-devouring barbarism" (Kant, WW., ii. 669).

This, then, if we would raise metaphysic into a science, is what we have to do. We must look about us for *principles*, and, by their aid, put reason's self to the question. Now what if these should be found precisely in those proceedings by which David Hume would seem to have brought the whole interest to a

dead-lock? Is it simply credible that the entire synthesis of experience should be the product of habit? The causal nexus, then, is not objective but subjective? The effect, that is, is attributed to the cause, not because of an objective reason that will be alike for everybody and perceivable by everybody, but because of a subjective reason in consequence of a habit that has force, and can have force, only for myself? With such course of reflection before us, surely we cannot help asking, Is this true? When the sun shines upon it, I expect a stone to warm. But is this expectation only a matter of habit? When I see the shining of the sun on the stone, is it only by habit that I think of the warmth? When I think of the arrow, I think of the bow; but is the arrow the cause of the bow? When I think of the moon, I think of the sun; but is the moon the cause of the sun? When I think the letter A in the alphabet, I think also B, and C, and D, etc.; and in numbers, when I think 1, I think as well 2, and 3, and 4, and 5, etc. In these cases, it is quite certain that there has been an habitual conjunction as far back as my memory carries me. But I have never considered the one the cause of the other. I feel that the nexus, in such a case, is one of custom, is one of habitual association, and that the reason for the conjunction lies in me, and not in the letters or the ciphers themselves—that it is subjective, and not objective. "Mrs Shandy," says Sterne, "could never hear the house-clock wound up, but the thoughts of some other things unavoidably popped into her head;" but we are not for a moment led to suppose that Mrs Shandy regarded the winding-up of the house-clock as the cause of those "other things." Habitual association is a nexus, then; but it is not the nexus of

causality. But take the principle in its absolutely general form—take the proposition of causality itself, *Every change must have a cause.* What is the nature of the evidence here? Merely subjective—an association that I feel I cannot help in consequence of habit? Or is it objective—bearing on a truth which I hold to be universal and necessary, valid for everybody, valid in itself—a truth which I intellectually perceive, and which I know everybody else will similarly perceive? Surely the nature of the evidence, the truth, here, must be called apodictic. The universality involved is not comparative merely; it is absolute. A change must have a cause. This is not only true because it is true, but because it must be true, and because its opposite is manifestly impossible. The necessity is rigorous; the universality is unexceptive. A change has a cause; a straight line is the shortest possible: compare the necessity and universality of the propositions. A change may be without cause; a straight line may not be the possible shortest: compare the absurdity and impossibility of the two contradictions. Is not the authority of the evidence in both of the original propositions equally stringent? The law of causality, then, is an apodictic truth!

But this is very strange. We have been taught to believe that apodictic evidence is confined to relations of ideas; and here seems a truth of an apodictic nature in what is, even glaringly, a matter of fact—a mere affair of experience! But how can that be possible? Experience tells us that something *is* so and so, but never that something *must be* so and so. How, then, can experience tell us that a change *must* have a cause? If we be right as regards the *probable evidence* of experience, it is not from experience that we can possibly

derive this truth. And yet it is easy to see that, without experience, we could never have the notion of a change. Change is an empirical fact; it is derived wholly *a posteriori:* how, then, can it possibly be connected with evidence apodictic, necessary, universal, such as attaches to the *a priori* alone of mathematical science? Well indeed might Hume be startled by the fact; and no wonder that he asked, how could apodictic truth attach to a manifest principle of experience? His answer, habit, custom, from frequency of association, is now manifestly incompetent. But can we find a better?

What, then, if it should turn out that Hume's considerations are only there to bring the general interest to a crisis?

And, first of all, in regard of the answer desiderated, is causality the only empirical principle that is so situated? The very question is a flash. If there be other such principles, it is only reasonable to suppose that they, one and all of them, will have a common ground; which ascertained, there will be a consequent advance at once to something equally new and important, something that will surely constitute one of the main pillars of human reason. Here at last we gain a glimpse of the possibility of metaphysic,—here at last, that is, we have come to the palace-gate "der Königinn aller Wissenschaften" (the queen of all the sciences), and the royal matron will no longer complain, forsaken and forlorn, like Hecuba, "Modo maxima rerum, tot generis natisque potens—nunc trahor exul, inops."[1]

David Hume, then, when he brought us to the *nexus* of causality, shall have brought us also to the

[1] Literal allusion to a sentence in the first preface to the K. of P. R. Kant appends to the quotation, with all the touching exactness of a German, "*Ovid. Metam.*"!

very porch of the sanctuary; and it is for us, completing the roll of all such principles, to give ourselves entrance with it into the very body of the edifice, taking it at long and last into an easy and a full possession.

The question, then, is, Are there any other such principles as this of causality—principles, that is, at once empirical and apodictic—what we shall presume to name principles *transcendental*?[1]

Now, where is it that this principle of causality is used—where is it generally to be found? Perhaps in the same neighbourhood we shall find others the like. But causality is one of the principles of general physics. Let us turn up the ordinary treatises on such subjects, and examine the leading propositions laid down as principles there. What is this, for example:—Throughout all its changes the original quantity of matter is neither lessened nor increased? What are we to say to a proposition of that nature? Here, again, something is spoken of that can only be known by experience, and yet an assertion is made respecting it of a strictly apodictic nature. We perceive the universality, the necessity of the proposition, the moment we understand it; or, what is the same thing, we perceive then the impossibility of its opposite or contradictory. We are conscious, too, that the nexus here is not, and cannot be, an affair of habit. Again, In all physical phenomena, action and reaction are equal. We have in this also apodictic evidence conjoined with elements of an empirical nature. Here then, now, we have at least three propositions that seem to rest on experience, and yet imply apodictic

[1] *Transcendent* is an object *beyond* experience. *Transcendental* applies to an object that is *in* experience, but yet of a *validity* that is *beyond* experience. Kant's question of *Quid juris* is addressed wholly to that validity, of which the causal nexus is an example.

certainty. The question, consequently, comes naturally, How is this? Above all, how can apodictic certainty attach to elements of an empirical nature? Are we quite certain that we stated the truth when we affirmed that experience declared only that a thing is, not that it must be? No, in that we cannot be wrong; experience *brings* to us *facts*, and we know thus that they are, but never that they must be. Sight tells us that there is such and such a colour, and again such and such a colour, as hearing that there are such and such sounds, or smell that there are such and such odours, or taste that there are such and such flavours, or touch that there are such and such feels. But all that I perceive in these or any such circumstances is that the facts *are* once for all so, without the slightest appearance of any reason being present in them to *necessitate* the so. The colour that is here might be the colour that is there, or the sound that was then might have been the feel that is now—and all this without the smallest contradiction. But the facts that enter the mind through any sense are all constituted in a similar manner. They all *enter;* the *fact*, then, of their being is acknowledged, but not the reason that necessitates their being, not the reason that renders it impossible for them not to be. So it is with the inner sense; we recognise all the mind's successive empirical states: they bring with them the fact of their existence, but not the necessity of their existence. The apodictic element in the propositions in question, then, cannot be referred to experience; it must be referred to some other source; and the question is, To what other? Nay, is it not simply impossible that there can be such other, even in consequence of the conclusion which we have just seen established at the hands of both philosophers, Locke

and Hume, that all our knowledge is due to experience alone? This it is, without doubt, that has been the obstruction to Hume, and the occasion of his resorting to a subjective principle of explanation, habit. But we have sufficiently seen the inadequacy of this explanation, and must obtain another.

It is evident, then, either that all our ideas do not arise from experience, or that we possess no such thing as an apodictic truth. But, apart from all consideration of any proposition immediately before us, we do possess apodictic truths: the mathematics and kindred branches found on such, contain such. Nay, Hume himself admits this. Under the phrase, relations of ideas, he alludes to a vast aggregate of ideas that are either intuitively or demonstratively certain—that are "discoverable by the mere operation of thought"—that "would for ever retain their certainty and evidence," though objects corresponding to them never existed in nature. How, then, can he have possibly reconciled himself to this duality in knowledge, and yet have believed that all knowledge was due to experience? The fact that these others were relations of ideas, and not qualities of existent objects, seems to have been latently and half-consciously the reason of his acquiescence without special inquiry. Perhaps, also, it appeared to him that mathematical truth was of an analytic nature, and flowed deductively, by expansion, under guidance of the principle of contradiction, from original definitions in which it lay from the first involved and implied. For it is to be acknowledged that the products of all such analytic procedure are of an apodictic nature, and their contraries would imply a contradiction. This, then, it was that probably occurred to Hume, though obscurely, in explanation of the

vast distinction that he observed and asserted to subsist between relations of ideas and matters of fact. But that, probably, was his misfortune as well. All, doubtless, would have issued very differently with him, had he but questioned the source of apodictic truth in the mathematics. So questioning, he would have been led to the consideration of such truth generally.[1]

[1] In the *Treatise* Hume devotes a whole "part" to the consideration of mathematical reasoning; and this, as usual, is not unrepresented in the re-cast of the *Enquiry*. No full student of his, then, can think of Hume as *neglecting* mathematics. Still a reader of the *Enquiry* alone might regard the mathematical allusions there as only casual; and this might have been the case with Kant. I do not recollect of any direct quotation from Hume in the *Kritik;* but at page 6 of the *Prolegomena* we have in a note what bears to be a verbal quotation from "*Versuche*, 4ter Theil, Seite 214, deutsche Uebers." Now the *Prolegomena* was published only once, Rosenkranz says, and that was in 1783. The German translations of Hume mentioned in any book beside me are these:—*Treatise*, Jakob, 1790; *Essays*, Tennemann, 1793; *Enquiry*, Tennemann, 1793; *Dialogues concerning Natural Religion*, Schreiter, 1781; *Enquiry*, Sulzer, 1755. It thus appears that the translation necessarily used by Kant ("Versuche," etc., as above) is, so far, omitted from mention. I have not as yet been able to verify in Hume the quotation actually made by Kant from these "Versuche;" but, supposing the latter to have used translations only, it is evidently fair to hold it probable that he was not a reader of the *Treatise*, and that he might, consequently, very well talk of Hume neglecting mathematics. (Quotation occurs "*Essay* 17.")

It was no failure, then, at least to *think* of mathematics that led to Hume's failure to reflect on the contradiction, which lay in the apodictic validity of relations of ideas, to the conclusion that all knowledge was due to experience, which, for its part, was competent to no more than probability. Whether he thought of mathematical truths being analytic only is another question, and one which I am hardly disposed to answer affirmatively. Relations of ideas, it appears to me, must have been thought of by Hume only in that jumbling sort of reference to complex ideas as inventions of the mind, which we find in Locke. We have seen this already in the quotation on our first page as concerns the power of the understanding to "make at pleasure new complex ideas even to an almost infinite variety;" and there is a passage in Hume (*Enquiry*, sec. v. part ii.) which, almost verbally identical with the entire citation from Locke, similarly ascribes to the mind a power of compounding ideas "to all the varieties of fiction and vision." We know, too, that Locke, in answer to the Bishop of Worcester, who objected that the idea of sub-

We have seen, then, that there are propositions of an apodictic nature, and yet apparently of an empirical origin; while there are others no less apodictic, but evidently independent of experience. How is this? How is it that truths or facts occupying fields so entirely different should yet possess evidence of identical stringency?

But, for a moment, we must here divert attention to this, that propositions fairly analytic are also apodictic. The reason is obvious. We have no occasion, in such cases, to resort to experience for the knowledge in question: that knowledge we attain by a mental operation, without any trial of what actual experience will teach. That is, analytic propositions are of an *a priori* nature, meaning by that the process of ascertainment by simple operation of the mind, though on grounds, it may be, previously

stance can be derived neither from sensation nor reflection, averred "that general ideas enter the mind neither through sensation nor through reflection, but are creations or inventions of the understanding." Reid (*Works*, p. 276) describes Locke's process in formation of the idea *genus* "till at last it becomes an abstract general idea," with powers, evidently, all its own. And the same sort of unconscious conviction is to be found in Hume again and again. Abstract ideas are to him, as complex ideas are, mere *entia rationis*, and their relations may, without any contradiction whatever to his inferences from experience, be as apodictic as they may. Relations of ideas refer, he says, always to quantity and number, and these are abstractions. Consequently, he is not at all led rightly to reflect by "the bold determinations of the abstract sciences." Even in concrete matters, "geometry assists," he says, only by giving us, through abstraction, "just dimensions." It is a great advantage to mathematical science that it can show its objects. "An oval is never mistaken for a circle," etc.; "though there never were a true circle or triangle in nature." To Hume there are really none such in nature, and so neither are there in nature those apodictic relations. The true circle is a fiction of the mind; and so are all its necessary qualities. He simply forgets the ellipses of the planets, and the triangles by the aid of which our mathematicians mete the heavens. Hume, in fact, like Locke, had very obscure ideas of the powers of mental abstraction; and it is at least doubtful whether the one or the other ever thought, in that connexion, either of analysis or of synthesis.

established by experience, without any *a posteriori* reference whatever to actual trial then and there. In this there is no difficulty. The truth is developed under leading of the principle of contradiction. That is, the reason that we give for any affirmation in this situation, is that it must be so and so, else it would contradict itself; and the principle in question is simply that an idea, proposition, judgment, must not contradict itself. But if anything is true, and must be true, otherwise it would contradict itself, it is evident that we have in hand something of an apodictic nature; and this, evidently, must be the result of all pure operations of the mind alone. As such, these operations are *a priori*, and the principle of their process is that they must not contradict themselves; and in this way it is evident that they must be apodictic.

Illustration will make this plain. All bodies are extended. This proposition is, so to speak, an analytic apodictic. The notion of *extension*, that is, is already contained in the notion *body;* and the proposition itself, consequently, simply *must* be true—true universally—else, as is evident, the notion body would be self-contradictory; its constituent quality, namely, being at once affirmed and denied of it. As much as this results, too, entirely by operation of the mind; or it is by such operation, and not by actual trial of some actual body then and there, that insight into the truth is attained. All bodies are divisible, is again an analytic proposition that is also *a priori* and apodictic; resting for its truth on process of mind, and not on process of experiment; for the divisibility, under penalty of infringing the law of contradiction, follows from the extension which is necessarily involved in the very notion of bodies or a body. Indeed, it will be

evident now that any complex notion whatever may be similarly expanded with consequent possibility to produce an even infinite number of propositions which, as analytic, are, however ultimately, at least proximately *a priori* and consequently apodictic; for the analysis that extends the insight, or constitutes the fulcrum of the predication, is, not a trial by sense, an experiment, an experience, but an action of intellect that, without contradiction, carries its own identity throughout.

Now, for us this is a most important consideration; for it meets at once a whole host of possible objections to our proceedings on the threshold. It has been our object, namely, to signalize the apodictic nature of the proposition of causality. Now, so far, an opponent might, having recourse to analysis, adduce against us a quite infinite number of apodictic propositions which, nevertheless, were, in the end, only due to experience. So it is that we have, in the first instance, eliminated all possible analytic propositions. It is our desire, namely, to confine attention to propositions which, while apodictic, are at the same time, also, not analytic, but synthetic. It is this now which, as our main interest, we proceed to explain.

The peculiarity of the proposition of causality, we say, is that, so to speak, it is an apodictic *synthetic*. This is the true universal and philosophical expression of Hume's problem, which is thus extended into a much more general reach. For the question now is not of a single proposition (causality), but of every proposition that founds on *a priori* synthesis. And we have already seen other such propositions besides that of causality: those of action and reaction, for example, and the permanence of substance. We say *a priori* synthesis; for apodictic synthesis, as not possibly due to experience (the evidence of which is

always only contingent or probable), must, as we have already seen, indeed, be at least *proximately a priori*. But what now if it must be even *ultimately a priori?* The apodictic necessity and universality that rest on analysis *may* be reduced to grounds in the end which are only empirical. But *can* this be the case with the apodictic assignments that rest on synthesis? There is, of course, a synthesis which is due to experience; but just because it is so due, it can never be apodictic. No direct evidence of experience—and a synthesis of experience is, by the very terms of it, necessarily direct—can ever be more than contingent. Any apodictic synthetic, consequently, must and can only found its peculiar validity on a principle of nexus, that is, not proximately, but ultimately and absolutely *a priori*. The full, exact, and completely general expression for Hume's problem, therefore, is at last this: How are apodictic synthetic propositions possible?

When we say all bodies are extended, we predicate one notion (extension) of another notion (body), which former notion already lay in said latter notion—as we term it, *impliciter*, not *expliciter*. But when we say, a straight line is the shortest possible between any two points, we predicate one notion of another notion where the first was not already contained in the second, whether impliciter or expliciter. Straightness is a quality, namely, and, as such, is alien to a consideration of quantity (shortest). Every change has its cause, again. Here the notion *cause* is really something quite other than the notion *change*. "The effect," says Hume, "is totally different from the cause, and consequently can never be discovered in it" (*Enquiry*, sec. iv. part 1). The proposition of causality, therefore, is synthetic, and quite as much

synthetic as that of the straight line. But now we have to consider, further, that all *empirical* propositions are, if we may say so, to the very core synthetic; the very nerve of their nexus is synthesis. We might almost see this in the very terms, experience, trial, etc.; for they import, in their very selves, that actual sense-examination of the express matter of fact has been the means of adding to one notion as subject another notion as predicate. Take, for example, All bodies are heavy. Here heavy is by no means a predicate that is involved or implied in the bare notion of body. A body having extension, but no weight, would not contradict our general notion here. Such notion, consequently, would not be self-contradictory. That all bodies are heavy, then—it is not by analysis or mental operation, it is not *a priori* in any degree, that we see into the truth in this case. On the contrary, it is only in consequence of experience, of actual trial, or, what is the same thing, it is only *a posteriori*, that we come to express any such sentence. How synthetic propositions spring from experience, then, will now be manifest; but it will now also be manifest that all such, resting for proof on experience or mere perception of sense, must be devoid of strict universality and rigorous necessity, and can possess only a *comparative* universality and necessity, the force of which will never exceed, logically, the experience on which it is founded. And now we can be at no loss to understand the nature of that peculiarity which distinguishes the proposition mainly before us. The attribution of an effect to a cause is a synthetic proposition; but, while synthetic, it is also apodictic. Being apodictic at the same time that it is not analytic, it cannot be of an origin empirical or *a posteriori*, but must depend at last on a mental operation, a process

of mind which, of necessity, also, can only be *a priori*. The other propositions which we have seen in the same connexion, permanence of matter, action and reaction, are of an identical nature; and we are again brought to the question of the origin of *a priori* synthesis, as the true general expression for the problem of Hume. This question, now, is the single question which constitutes the special and particular interest of our whole general inquiry.

For said inquiry, another leading consideration, too, is this. It is quite evident, from all that has been said, that these *a priori* synthetics will be the result of the mind itself, of the intellectual faculties themselves. Now, this will prove decisive of the distribution and general procedure of our inquiry itself. For if the truths in question flow from the mind itself, from our intellectual powers, it is evidently by an analysis of these latter, respectively in their order, that the former will discover themselves. In this way, too, we already provide our enterprise, in the significant show of anterior probability, with a gage and guarantee of success. For this is plain: that, if knowledge be a combination of elements, which elements are partly from without and partly from within, it will, in these latter elements, necessarily possess an *a priori* material—an *a priori* material which has been contributed by the mental faculty itself in the performance of its proper function on the matter presented to it for that purpose from without.

It is very specially important that we should be aware of this, that the faculty concerned is an intellectual faculty, a cognitive faculty, the faculty by which we acquire knowledge. We are not to figure mere passive sensation here, but, on the contrary, active perception. For only so will it be that the

mental contribution will bring with it the force and conviction, the necessity and universality, together with the insight, of a reason. In short, we shall presently learn that the faculty mainly concerned is that of judgment, and judgment is, par excellence, the faculty that *discerns*. The principle contributed by the mind, then, the *a priori* element that, in perception, is added to the *a posteriori* element, must not be viewed as of the same nature as an instinct. This principle, this element, is not to be called, with the Scotch philosophers, an implanted first principle, an original principle of the very constitution of the mind, an innate and instinctive tendency. We are not to say, as they, that we are so constituted that we cannot think otherwise, etc. This was the answer that all the Scotch actually bawled to Hume; and, after all, it was Hume's own![1] Hume, in fact, has no object unless to show that, for our expecting the future to resemble the past, we can allege not the shadow of a reason, and that it is only through an instinct we anticipate the recurrence of customary conjunctions. If Hume's instinct here differs from that of Reid and the rest in the same reference, it is only in the need of a customary conjunction to excite it. Hume does not himself so correlate his instinct with his custom or his custom with his instinct; but perhaps it is not illegitimate to suppose as much. In that case Reid's instinct will only differ from Hume's in being direct, while Hume's, as requiring custom to call it into action, will only be indirect. The instinct, however, as an instinct, is not more blind with Hume

[1] Of course I hold him not to have known Dugald Stewart when I say this for Kant. For it is a fact that everybody that in this country has come after Reid (I do not speak of Beattie or Oswald), namely, Stewart, Brown, etc., have, on the whole, taken their causality—very absurdly—from Hume.

than it is with Reid himself. It is to be understood, then, that our principle is by no means of this nature; it is no blind instinctive tendency, but an act of intellectual insight, capable of asserting, explaining, and justifying itself by argument or reason. And thus, as Hume's call was simply for this argument or reason, we shall be able, it is to be hoped, to give a satisfactory answer to his question at last.

Our inquiry, therefore, is capable of being explained in another manner than in that with reference to the origin of apodictic synthesis, or how apodictic synthetic propositions are to be conceived possible. We can say, namely, that the question it involves is, In receiving the material of sense, does the intellect, even in the act of receiving, *add* anything? In that case it would be easy to understand that any object presented to us must be a compound, a compound which, even as objectively, sensuously, perhaps externally there, contains in it elements quite as much from the within of intellect as from the without of sense; quite as much from the seeing activity of the one as from the blind passivity of the other. Alexander explains the *σύνολον* of Aristotle to be *τὸ καθ' ἕκαστον αἰσθητὸν καὶ συναμφότερον ἐξ ὕλης καὶ εἴδους*; which means that, to Aristotle, every individual object of sense was a compound at once of both matter and form.[1] Now, that is precisely what any individual object is to us; it is a compound of *matter from the senses* and of *form from the mind*. That house, that tree, this table, this pen, outward, external as they are, are not wholly so, but have forms projected into them from within my own self, even in the very act of my perceiving them; which forms, however, present themselves to me as much externally as the products proper of sense itself,

[1] Kant, perhaps, did not know Alexander, but the reader will pass me this.

and constitute thus, notwithstanding their origin within, veritable outward realities. This, at least, is our theory, this is what suggests itself to us as the only possible means of *a priori* synthesis, the only possible rationale of the existence of *a priori* synthetics in such an experience as ours. For we have always to recollect that what we call things are but aggregates of our own sensations, and nothing really without. But that being so, any further manipulation of our sensations can only take place within; and it is only within, therefore, that we must search for the rationale and the means of the apodictic synthesis which we find to be a fact in experience. This, then, is what is meant by our *Kritik* or *critique*. It is an analysis of our intellectual or cognitive faculty in search of those principles or elements which this faculty, unobserved of us, contributes and imparts to the special materials of sense, thereby raising these from the mere contingency and subjectivity of feeling into the necessity and objectivity of formal perception.

Now just this it is that has escaped both Locke and Hume. Locke perceived that all knowledge began with sensation and contained sensation; but he found in sensation, for all that, principles of quite another order, which, however, as in sensation, though of a validity quite beyond sensation, he yet unreflectingly referred to sensation. In this way he was tempted to make use of these principles, and advance with them in questions utterly beyond the limits of experience, which he himself had given himself; and thus he unconsciously opened a wide door of encouragement to the visionary extravagance of mere fanaticism. Hume, again, awake to the nature of the evidence of experience, saw clearly that, with elements from experience, such subjects were beyond our scope; and, indeed, in

regard to matters of our everyday life, he found, or thought he found, that experience, when closely questioned, could assign no reason for its own authority but custom. No wonder then, now, that, such a taproot of existence as the law of causality being withdrawn, there seemed left to him no consistent philosophical creed but that of the later Academy. In all this Hume had for his object truth. He had no expectation, nevertheless, that the doubts of the school would be transferred to the streets. "I shall allow, if you please, that the one proposition *may justly be inferred* from the other." "Though none but a fool or madman will ever pretend to dispute the authority of experience, or to reject that great guide of human life, it may surely be allowed a philosopher," etc. "My practice, you say, refutes my doubts; but you mistake the purport of my question: as an agent, I am quite satisfied in the point, but as a philosopher," etc. "Nature will always maintain her rights, and prevail in the end over any abstract reasoning whatsoever." This is what Hume says always for himself, and no Beattie among them could ever have said anything more or better. As bees rush out at the attacking plunderer, even so it was with the rush of the Scotch at perhaps the best proof of their own intellect, Hume. "Metaphysic's usual unlucky fate willed it, that he was understood by nobody: one cannot, without a certain very sensible pain, remark how utterly and persistently his opponents, Reid, Oswald, Beattie, and even at last Priestley, missed the point of his problem, and, while always assuming as undoubted precisely what he questioned, held up, on the other hand, with violence, and frequently with signal insolence, proofs of what it never entered his head for a moment to doubt" (*Proleg.*, p. 7).

Locke, then, failed to perceive that experience could not authorize the application of its own principles beyond the field of experience. Still his industry has been of great service; and he has well illustrated the empirical process of the origin and acquisition of knowledge. He has answered the question *Quid facti?* He has shown the state of the fact, or what in actual fact takes place. But he has not answered the question *Quid juris?* The right or authority brought, in certain cases of experience, of a validity beyond experience, was not inquired into; the fact was simply accepted. *We*, for our part, however, discern, in such cases, a right, an authority asserted which experience cannot warrant, and we immediately ask, *Quid juris*—whence these powers? This, too, Hume asked; but it was in the case of cause and effect only. He failed to perceive that the question was a universal question, and applied to an entire sphere. Failing to universalize his problem, he failed in his answer; and believing that he had nothing but experience before him, he had recourse only to a principle in experience, a subjective principle, which was all too weak to authenticate necessities and universalities at once apodictic and synthetic.

This question of *Quid juris?* practically put by Hume, is what we inherit from him. We put it, however, not as he put it, to an isolated case, but to the entire body and the general principle of all possible cases of an authority in experience which, as at once apodictic and synthetic, is beyond the powers of experience. We perceive that necessity and universality are perfectly explicable and intelligible in the case of all analytic propositions; for their truth is inferred by analysis of the mind according to the law of con-

tradiction. We perceive, also, that there are synthetic propositions resting on experience, which, in fact, just finds, and tells it finds, such and such predicate actually present in such and such subject, but alleges, withal, only the *factum* of the existence for sense, and not the *jus* of any peculiar validity for the intellect. Now, it is precisely this validity that *we* see, and precisely this *jus* that we demand. Should there be a proposition such that analysis cannot find the predicate in the subject, and, moreover, such that the predicate is still apodictically affirmed of the subject, then we say that the reason of this apodictic synthesis can only be sought for in the mind—(it is not possibly in experience)—it can only be *a priori*. And thus it is that we are led to the supposition of elements actually in the object, but coming to it from within, not from without.

Any such elements we shall, as already intimated, name *transcendental*. *Transcendent*, as we have said, is an object such that it is absolutely beyond the experience of sense. It never can be *constitutively* found in the experience of sense. Nevertheless what is *constitutively transcendent*, may still be *regulatively transcendental*, should its idea be found, like those of God, Free Will, Immortality, in any way to act on experience. We assume, too, as we may say here, that there are things in themselves underlying and causing the sensations which we combine into the only things actually known to us. These things in themselves we not only do not know, but, as sensible creatures, never can know. They are really transcendent, then; nevertheless, we may call them transcendental, and even *constitutively* transcendental, inasmuch as, though we know them not, we assume them to be the actual factors or stimuli of experience.

The theory is, then, that, in perception, form from within blends with matter from without into the actual object of it. These elements from within, gliding from the faculty or faculties themselves, are the transcendental elements—elements *a priori* or mental in origin, but *a posteriori* or empirical in use. It is thus manifest that the work imposed upon us is an analysis of the cognitive or perceptive faculties with the hope of discovering thereby the special contributions of these faculties to the compound of experience.

It may not be seen at first, but this apparently very simple matter involves no less than a revolution—a revolution in metaphysics only comparable, in its own way, with that of Copernicus in physics. As he reversed the relation in these, we reverse it in those. Before him, it was the heavens revolved, while the earth remained at rest: after him, it is the earth revolves, while the heavens remain at rest. Similarly here: while formerly the subject had to depend upon and wait for the object, what is proposed now is that the object shall depend upon and wait for the subject. And with this there is at once a glimpse of hope. So long, that is, as we can only know what the object tells us, we are in subjection to experience for all knowledge, and, consequently, there is none such necessary, but all is contingent. Should it be found, however, that we ourselves contribute to knowledge, even to the knowledge of objects, then, evidently, there *is* an *a priori*, and that is metaphysic. Nearer still, when we consider that the three propositions to which we have come, of substantiality, causality, and reciprocity exhaust the *relations*, while mathematics apply to *quantity*, which is another affection, of *the logical judgment*, it would

seem that we have something to confirm us in the hope of discovery in that we subject the cognitive faculty to inquest; for the cognitive faculty is judgment, or judgment is but another name for the intellectual faculty, for thought, for the mind itself. But of this, as perhaps premature now, and only suggestive for the moment, later.

At all events, this is plain, that if we succeed in the inquest proposed, we shall succeed, in that we answer the question of Hume, not only in mediating between Locke and Leibnitz, but equally in mediating between dogmatism and scepticism themselves. This is the position of *criticism*. Criticism, thus, will at once do justice to the *a posteriori* and the *a priori*; and it will also reconcile as well assertion with doubt, as doubt with assertion, *by proof*.

With all this, we must never forget that the only use of the *a priori* is to work up the *a posteriori*;—that the whole business is, on the one hand, for the *a priori* to add to the *a posteriori* the *form* that fails it, as, on the other hand, for the *a posteriori* to add in turn, the *matter* that is no less wanting to the *a priori*. All that is concerned, indeed, is the possibility of experience; and we already see how it will be situated here, whether on the one side or the other; for, of course, this is evident, that we can entertain no question of any experience but this sensitivo-intelligible or intellectivo-sensible experience of ours.

What, then, is the faculty, or are the faculties in question? Or, otherwise, what are the intellectual faculties? What are those powers or faculties of the mind which all concur in the one office or function of producing knowledge? Now, it may be objected that what we aim at here can only be known by experience, and that, consequently, we are simply

beginning, as Locke began and as Hume continued —simply beginning an *a priori* inquiry with the old exploded basis of the *a posteriori*, of experience itself. But, surely, the mind itself is *a priori;* surely it precedes and is independent of experience. Let the common brocard, *Nihil est in intellectu, quod non fuerit in sensu*, be as true as it may, still, since Leibnitz, must we not all say with Leibnitz, *Nisi intellectus ipse?* Should we regard mind, then, as an *a priori* basis—as very specially *the a priori* basis—as much as this may prove warrant enough. But, to render the foundation even more irreproachable, or, in fact, just to insure conviction, we appeal to logic. All knowledge begins with experience, and so also the science of logic; but all knowledge does not require to remain experience, and neither does the science of logic, nor did it. The true science of logic has eliminated all its *a posteriori* or empirical elements, and stands now rigorously pure and all incontrovertibly *a priori*. It has so stood, indeed, since the days of Aristotle, and will now *in sempiternum* undoubtedly so stand. Logic, of course, has been differently treated by different expositors, and it has not always been kept pure. In its pure form it occupies no great space; and so, those who have treated of it have generally found it convenient, or for their interests necessary, to enlarge its contents by adding to them much foreign, though perhaps cognate, matter. And here we have in mind only universal or elementary logic; naturally excluding from view the particular logic that may precede (not but that it always comes last in time) any particular whole of inquiry, as directing and guiding its general disposition and conduct. It has been the interest, then, of many writers to eke out the scanty pages of general logic with certain additions. For

instance, many have filled out their books with preliminary matter bearing on psychology; and many, again, have displayed a like industry with reference to those empirical circumstances which impede or promote the process of thought, as our passions, prejudices, etc. The latter of these references we name *applied* logic; of which the business, evidently, is neither *organon* nor *canon*, but simply a *catharticon*, of thought.

We say, then, that the science of logic in its purity —universal logic, general logic, elementary logic—is an absolutely complete and also an absolutely *a priori* science. It is complete, because, though existing now for more than two thousand years, and the constant object of consideration to the very highest intellects of each succeeding age, it has yet, since the days of Aristotle, not moved a single step whether in advance or retreat. It is *a priori* because it is a science purely formal; it excludes from consideration all matter of thought whatever, and relates solely to the forms of it. The laws it establishes, the rules it prescribes, concern not the thing, object, or matter that is thought, but simply the general process and processes, the general forms of the mind, in thinking. These laws and rules, these processes and forms, are absolutely general and completely independent of any particular subject-matter to which they may be applied. Surely, then, in initiating an inquiry into the existence and nature of *a priori* knowledge, we are quite entitled to assume as *a priori* at once mind and the science of mind. Even as such science, we might say, that the science of logic must be *a priori* and complete; for it depends on a unity, on the concrete, organic unity of what is itself *a priori* and complete, the mind.

The divisions of logic, therefore, will throw the

required light on the divisions of our subject. One great division is into the analytic and the method; the former being a classified discussion of all the elements of the subject concerned, and the latter relating to those elements as applied. This distribution we shall adopt, but not formally. Our main inquiry shall correspond to the analytic; but only certain corollaries thence shall represent the method. Again, that part of general logic which is named dialectic, while nominally having place with us, shall be substantially different. The origin of dialectic lies in this, that the formal laws of thought, while furnishing merely a negative condition of truth, and consequently adequate only to a *canon* in test and guidance of the disposition of its matter, are actually used as an *organon* of enlargement, discovery, and creation. But this is manifestly wholly incompetent to what is only a formal and negative guide. General logic can never constitute any such instrument of attainment, any such *organon* of knowledge, but simply, as said, a *canon* or standard for its correction and safety. Dialectic, then, in that it rests on logic as an organon, is evidently without support. What we shall substitute for this usual false dialectic, will be the consideration of an unavoidable dialectic which springs up naturally, as it were, from our unconscious application of *the results of our analytic*, not as a *canon*, which it is, but again as an *organon*, which it is not. For the result of our inquiry, as it is not difficult to foresee, will be veritably a counterpart to general formal logic: as the latter supplies the forms of thinking in general, the former will have to find for us, not mere *forms*, but the pure or *a priori matter* thrown by the mind into the products of sense: it will be properly named, therefore, *transcendental* logic, the logic of

what matter in the objects of experience, and experience as a whole, is *a priori* furnished by the mind itself; and it is really no contradiction that that *matter* should be only formal, or consist only of forms.

This transcendental logic, again, will have the same more particular divisions as general logic, which, for its part, is divided into simple apprehension, judgment, and reason. These, namely, are the intellectual faculties; these are the mental powers, and all the mental powers which have to do with the procuring and extending of knowledge. And it is precisely from an analysis of these powers that we are to expect a discovery of the *a priori* moiety of knowledge, even knowledge *perceptive*. Such faculties as imagination, memory, abstraction, etc., are but implied in these, or are only other names for particular functions of these. Our inquiry, then, will, in the first instance, fall into three books under these three headings respectively; and the further subdivisions will develop themselves as we proceed.

Our first book, accordingly, will, in consideration of the pure or *a priori* contributions to perception, treat of simple apprehension; our second of judgment; and our third of reason.

Book I.—Apprehension.

1.

Relation of Sense to Apprehension.

Apprehension is the faculty by which, according to logicians, notions are formed and reproduced. Our quest being only what addition to materials of sense

is made by the mind itself in receiving and dealing with them, it is evident that, of the two operations here, formation will have much more promise for us than reproduction. The latter will have its own place, as we shall afterwards see, in the scheme of the general process for the realization of perception; but in so far as it simply involves repetition and not formation, it is evidently not addition that we are to look for on its part. What, then, is to have interest for us here is—the *formation* of a notion; and that suggests two questions: 1, What are notions? and 2, How are notions formed? What we mean by notion, is what Hume meant by his "idea" when he called it "copy of an impression." After experience of a sensible fact, we come away with a notion or idea of that fact; which, obviously, is just this, that, having had an impression by sense, we have a notion of it by reflection. From this it would follow that a notion is confined to reflection and has no place in the impression. This, however, we shall find reason to question—impression being understood, that is, to stand for what in general we call object of sense.

As regards the formation of objects, that is no concern of general logic, so far as it implies the taking up or *apprehension* into sense of the object which, as the original, precedes the notion, as the copy. With us, however, this is different; for it is just possible that in the very taking up of the object, the bare apprehension of it, there may be an addition made to it by the faculty that takes up or apprehends, and in this very act. The faculty or faculties of sense, then, if properly omitted from a general logic, must, very certainly, have place here in the transcendental logic. We, for our part, namely, must omit no step in the general pro-

cess of arriving at knowledge; and it is evident at once that the sources of knowledge can be referred to two heads—sense by which objects are given, and understanding by which they are thought. We may hazard the conjecture that these are but two stems from a common root; but we cannot as yet identify them, and must regard them apart. At all events, to an act of perception proper, we believe that both faculties must concur; and therefore it is that we have ventured to commit the apparent inconsistency of introducing questions of sense into an inquiry that guides itself by the divisions of general logic,—the rather that these questions with us will concern, not what is *a posteriori*, but what is *a priori*, even in sense. A transcendental logic is bound, in its search for *a priori* elements, to investigate the sensuous as well as the intellectual part of the general process of apprehension.

The only faculties that are commonly spoken of as relating to sense, are sensation and perception. Of these, looking firstly at their external use, the former (special sense), plainly, is wholly of an *a posteriori* reference, and can relate only to a matter that must be *given*. Smell, taste, touch, sight, hearing, concern odours, savours, feels, light, sound; and all of these can only come to us *a posteriori*, or from actual impression (meaning by the word impression, however, only, as Hume did, the actual sentient state without reference to any impressing cause). There is no possibility of arriving *a priori* at any smell, or taste, or touch, or sight, etc.: for these, come from whence they may, we have always to wait. External sensation, then, evidently contributes only what is strictly empirical. Its function is passive only; it is a mere receptivity; it simply takes up what is *given* to it.

And yet, again, does it give what is given to it? *Can* a *sense* give what is given it? In smell, for example, is the odour *qua* odour really from the object? That the object precedes this state of mine which I call odour, I readily admit; but this odour *is*, after all, *a state of mine;* it is a mere modification of my own feeling,—whatever may be in the object to cause it. What that may be—what quality in the object apart from my feeling, but inferred as cause of my feeling—I know not at all, and never can know. No sensation can give me any information but how *I* am affected—*I myself.* Of any information as regards the object I am entirely void, except that this my state is (inferentially) of its excitation. A knowledge of this *my* state, nevertheless, let it be as clear, distinct, and accurate as it may, is not, and never can be, a knowledge of *its* state, a knowledge of *it.* Insight into my own self is never insight into anything else. The object, be it what it may, can only affect me; and I can only know how, as affected, I feel. In no case of affection from something else—and all that I *can* know *is* affection from something else—can I ever get to any consciousness but of some feeling of my own. This state of the case is not peculiar to one sense (smell), but is the same in all. The taste of sweetness, for example, is mine, it is wholly a condition of my own self; I can never get out of my own self to know how that is constituted which caused it. Were a drum sentient, what could it know of any body that struck it? It could only know its own vibrations, and precisely the same vibrations might be set up by a thousand different causes. Touch, too, only relates to certain feelings of pressure or resistance in me: these are conditions of mine, not of the object. The case is not one whit different with light or colour;

and light or colour is all that *sight* can *see*. Lastly, has my state of being when under sensation of sound any resemblance whatever to these trembling strings or to this trembling air? To know an object in itself, or as it is in itself, demands an understanding that can function directly on this object, and not one that can act only indirectly on it through a medium of sense. But such an understanding would be one not confined, like ours, to the reflecting of resultant notions: it would be one that *perceived* at the same time that it reflected. It would be directly present to the things themselves and as they are in themselves. Such an intellect, as an *intellectuelle Anschauung*, an *intuitus originarius*, we may attribute to the Supreme Being, but never to man, who, confined to an indirect knowledge only through medium of sense, can possess no more than an *intuitus derivativus*. This fact is fundamental in our present inquiry, and must never be lost sight of. We know only our own affections. What we call things, and know as things, are only these affections themselves, variously combined, manipulated, and placed. We assume *things in themselves* as antecedents, antecedent stimuli, of these affections; but these *stimuli*, these *antecedents*, these *things in themselves*, we know not at all, and never—remaining as we are—can know. The affection of sense, on the assumption of things in themselves, at once reveals their presence and conceals what they are in themselves for ever; at once grants and denies access to them. The window that admits is at the same time the wall that excludes.

But, in such references, it is not different with inner sense. Joy, grief, hate, scorn, are all subjective feelings of my own that only follow *a posteriori* from antecedents that precede them. Accordingly, as it

is only by the intervention of sense that we know the outer object, which, therefore, can never be known in itself, so it is only by the intervention of sense that we know the inner subject—which, similarly, therefore, can never be known in itself. No doubt every consciousness within me must be accompanied by the further consciousness *I*, or *it is I that am here and now thinking;* but this I is but a logical copula—it is wholly without matter of contents—it is but a point, but a bare logical idea, that connects, certainly, but is itself void, or has nothing to show for itself, nothing to exhibit in constitution of itself. Now, beside this I, the other I, the I that undergoes the succession of empirical states, the I of the inner sense, the I of *empirical* consciousness, is—so far as it is to be considered *in itself*—equally unknown, for any knowledge in its regard is only through intervention of sense, and any such knowledge is in all cases phenomenal only, and never noumenal.

Sensation, then, outer and inner, must be *a posteriori*, for it is entirely passive and waits—waits for the affection that simply comes to it, it knows not how or whence. What, as contradistinguished from sensation, we call perception, however, has, while still very palpably an affair of sense, more than a passive character: it at least combines, and that is no function of mere receptivity. Accordingly, though we cannot but eliminate sensation here, it is quite possible that perception as perception may have elements for our purposes. Perception, that is, may possibly contribute to the general web of knowledge or experience a thread or threads specially its own and utterly independent of experience as regards origin. The question, then, is, Are there any pure perceptions, any non-empirical perceptions? And

if we can but discharge from perception in general all the empirical colours, if we can remove from the general web, that is, all materials that are evidently *a posteriori* and from experience, the means for an answer will remain for us; for either we shall have pure perceptions left, or we shall have none and just nothing at all. Now let us attempt this with outer perception, let us discharge from general outer perception anything of *a posteriori* origin, smell, colour, taste, etc.,—let us attempt this, and we shall speedily find that, having withdrawn all objects whatever of an empirical nature, there remains behind—space, which we cannot withdraw, nor conceive withdrawn. In like manner, when we withdraw from inner sense all the *a posteriori* elements, all empirical states whatever, there remains behind—time, which we can neither withdraw, nor conceive withdrawn. We can conceive the removal of every element of sense, inner or outer, except space and time; which, so to speak, are there before all other experiences, as only to receive these, and which, consequently, remain when the others disappear. What, then, are they—what are space and time? If still entities of sense, they are manifestly very different from all other such. *Their* abstraction is inconceivable. Neither do they seem to have objects, as all other sensations have. Nay, they do not seem indebted to any sense for their introduction, like the others. Space is not an affair of any special sense or senses, and just as little so is time. They do not seem things, then; nor qualities inherent in things; nor relations between things: they are entirely independent of things in any aspect, and would subsist though the whole universe of things were bodily taken away. All things, indeed, are finite, but *they* are infinite. Space is absolutely boundless;

time absolutely without either beginning or end. We cannot possibly call entities differing so widely from things by the name of things. Such *un*things things!—we cannot say so.

What, then, are they? They are pure—not sensations—but perceptions, pure objects, pure *Anschauungen*, which word involves both characters. They are the contributions of the faculty itself; the one attaching itself to all objects of outer, the other to all objects of inner perception, and so also through these to all objects whatever.

A word or two of argument may be necessary to develop further the position assumed. And, first, they are non-empirical and quite independent of experience; for, in regard of things, to be able to perceive, not only that they are, the one from the other, different, but also that they are in different *places*, is to *add* an element which the things themselves manifestly do not bring, but which is, equally manifestly, simply presupposed as the fundamentally universal and necessary condition of the existence of things. And it is precisely so with time. All objects are in time; *it* is not derived from *them; they* are in *it*, as the universal and necessary condition of the very existence of *them*.

Secondly, then, they are universal and necessary. But, as such, they are not possibly *a posteriori;* they must be, and can only be, *a priori* contributions of our faculties themselves.

Thirdly, they are still *perceptions*, not *notions*—contributions of sense (general sense), not contributions of the understanding. They are each single, and have not the generality which a notion involves. A notion has many individuals *under* it; but the parts of a perception are *in* it; and such is the constitution

of space and time. The parts of space and time are *in* each; they are but limitations of the one single space and the one single time. Such parts do not precede their wholes, as the species precede the genus, or the individuals the species; they are, on the contrary, even as parts, with their wholes, one. In short, time and space are, though infinite, single, each a *representatio singularis*, just like every other object of perception; they resemble in no way a notion, which is always a generality, a *representatio per notas communes;* they are not of a logical nature at all, but, in very truth, *sensible.* They are perceptions, pure perceptions, actually pure objects—pure objects of general sense.

How simple, now, the apodictic validity of all evidence that concerns the relations in geometry, for example. We simply *see* that the straight line is the shortest: it is a truth perceptive, it is a truth intuitive, as this word used to be understood, though tantamount now, for the most part, only to *instinctive* or *immediate* and *at once.* An intuition is *evidence*, and no blind trick of our original constitution itself; in fact, it is truth at a glance, and the *glance* should not be lost sight of. Had Hume, who understood the word, but investigated what it implied—the foundation of the mathematics, namely—he would, in all probability, not have left the general problem to us.

What we perceive, then, are only *phenomena*, and never *noumena*, though we may hold the former to be gages and guarantees of the existence of the latter. In short, both outer object and inner subject, being perceived only through sense, are, by necessary consequence, perceived also, not as they are in themselves, or not as they just *are*, but merely as they *appear.* Whether we look to space or time, it is only

our own states we know in either; and the subject of these states, as in itself and apart from these states, apart from the form or forms of sense, is no more known than the alien object or objects are known, which, in the external reference, are supposed to *act on* said subject, and, in that way, *account for* its external states.

But such being the nature of space and time, we see at once how very much mistaken the school of Leibnitz and Wolff must have been in asserting space and time to be objects of the understanding, and in attributing to us a knowledge in their regard not possibly other than obscure and confused, inasmuch as sense was in its own nature but a more obscure and confused kind of understanding. The difference between sense and understanding is generic: it is not a mere less or more of quantity; it is a difference in kind, a total difference of elemental quality. By our theory, in fact, we avoid not only the difficulties of Leibnitz and the metaphysicians, but those of the mathematicians as well. With the former, for example, it was impossible to explain how forms of the understanding, and nowise different from the form proper of the understanding but in that they were specially less perfect and more confused than it, should yet possess evidence (as in geometry) specially clear, specially perfect,—specially apodictic, in short. With the latter, again, who assume space and time to be simply objects of sense *a posteriori* made known to us like all other such, there cannot be any answer given why empirical elements should yet, exceptionally and contradictorily, extend to us an apodictic evidence—at the same time that we are left with two infinite *un*things, totally unlike all that we call things, staring us in the face.

2.

Relation of the Understanding to Apprehension.

Objects, then, affect the mind through sensation, and the resultant affections become disposed and arranged (but *under* other influences to be afterwards seen) in the two receptacula, as it were, of space and time. These two receptacula are universal forms, to the conditions of which all affections of sense must conform; and thus it is that we are enabled, *a priori*, to know and predicate many peculiarities of objects, which objects can themselves be known only *a posteriori* and by experience—all those peculiarities, namely, which all objects must take on in obedience to the general forms of sense through which alone they can present themselves. Space, for example, has three dimensions, and, consequently, all objects of sensation are similarly constituted. Time, again, is only of one dimension, and therefore it is that all the variety of inner sense must present itself in conformity to this quality. All the conditions that pure science discovers in the general structure of either form, are evidently predicable of all objects that can ever come into experience. So also does it become evident that, though *a priori* and independent of experience, they are there only *for* experience. Their use and purpose, and the final cause of their construction, relate to the *a posteriori* world that is to be given to them through sensation. They are, as it were, discs projected from within for the reception and co-ordination of the variety of particulars from without; and thus it is that science can discover in them no law or principle capable of conveying information relating to any world but that of experience. So also is it, as we can easily understand,

that no knowledge of either time or space would have been possible without experience: it is only in actual experience that they present themselves to us, and without actual experience they could never have been known. The moment that inner sense is awakened to exercise by the possession of objects (states of empirical consciousness), the subjection of these objects to the law of time is obvious; and this latter (time) takes up as objective and, so to speak, empirical a position as those former (the objects or states) themselves. So, also, the moment that outer sense is awakened to exercise by the possession of *its* objects, the subjection of these to the laws and modes of space becomes equally obvious; and the rôle played by space is as much outward and real as that of the objects themselves. The objects are perceived, and time and space are perceived in connexion with them. Time and space are, as it were, the spectra projected for reception of objects, and present themselves to us only *with* these objects, and as of identical nature and origin. Locke, then, had perfect reason in assuming that, *de facto*, our information in regard to time and space depends on experience; at the same time that it is only our inquiry *de jure*, or concerning the authority asserted by them, that gives the key to their true nature. Though in sense and only known by sense, they bring with them such peculiarities as single them out from all other objects of sense whatever, and it is the investigation of these peculiarities that leads us to see that they cannot be of an *a posteriori*, but must be of an *a priori* origin.

In asserting, too, that all objects of *a posteriori* knowledge must submit themselves to these forms, it does not follow that the *special* form of each individual object is also to be considered as so due. How it is

that a mountain has this shape, and a tree that one, does not depend on space, for example, but on the *object-in-itself*. That object-in-itself, however, we never can know: we only know that, be its special form what it may, or, in obedience to its own transcendent or absolute nature (and *transcendent* is easily seen to be capable of being allowably replaced there by *transcendental*), let the special form it produces in us be what it may, that special form must still present itself as in subjection to the general laws of space. It is no objection, then, to say, This brick and that stone have each a shape of its own, which shape they cannot receive from space; for the answer is easy. We do not say that the special empirical form is due to space; there is something in the object-in-itself that says the special empirical form shall be this only, and not another. Still the special empirical production must obey the universal conditions of space and become—but only in its own way—*spatial*.[1]

And there is nothing really difficult in this. There *are* outer objects—meaning by the term at this moment what we name *things-in-themselves;* but they are wholly cut off from us—even by the very effects they produce in us. We are in presence only of these effects, or of our own resultant affections. These affections are therefore inner; and there is no difficulty in the conception of their receiving further modification and development in and from the inner apparatus into which they have been received, and to which they now for ever belong. Nay, it is natural

[1] It will be seen here that, as in some other cases, I have not scrupled to state and meet in the reproduction a difficulty which, as hinted in another work, I have not seen struck upon elsewhere, but which, for all that, must, I should say, have been very commonly felt by all *students* of Kant. The reproduction is a *free* one: see "Apprehension," etc.

to suppose that new arrangements will take place on their being thus received into mental consciousness. They are in themselves, as *a posteriori*, wholly disjunct, in an element of contingency; and if there is to be such a thing as a ruled and regulated context of experience at all, in submission, namely, to necessary principles by which systematic arrangement and completeness will be produced, these principles must be of an *a priori* nature, and so bring with them an authority which experience (the *a posteriori*) can never bring. If experience, in short, is to be a connected whole, it is absolutely necessary that our contingent affections due to experience should be subject to an element of necessity; and, these affections being once for all within, *that* element can only come from within. Were our objects the things-in-themselves, then there could be no apodictic knowledge in their regard possible; for, in that case, we could have no knowledge but through experience, and such knowledge never brings, and can never bring, such authority. That is, evidently, for any information that bore on such things we should be wholly dependent on these things; we should have to *wait* for them and it; *it*, consequently, as *a posteriori* and empirical, would be and could be contingent only. All would be as we just found it; and, as with matters of fact now, we could say no more then than that the state of the case *was* so and so, but not that it *must be* so and so. But our objects are not the things-in-themselves; they are not noumena but phenomena; and so long as our understanding is a discursive one, and, consequently, dependent on sense for *matter* of discourse, or so long as we cognise only through notions, which notions, again, can themselves only obtain filling, contents, through the information

of senses, inner or outer, we never can attain—whether we look to object or to subject—to the presence of things-in-themselves. Were our objects the things-in-themselves, they would consist wholly and solely of their own elements, and would possess no ingredient whatever derived from us; but they are not the things-in-themselves — they are not things in themselves at all; they are only affections of our own within, though due, it may be, to the action on us of such things in themselves. Now affections of our own within can only receive order and arrangement from within. How, then, there can be an *a priori* element in what is an actual, objective, and, it may be, outer fact, is not difficult to see; and it is not more difficult to see now, also, that that objective fact, so far as it is *a posteriori*, can only be contingent, and, as contingent, stands palpably in need of some further manipulation that shall raise it into the necessity and law of a consistent universe; such manipulation, for its part, evidently involving such principles as are in question—principles which are also within, and attach themselves from within, but which are of an *a priori* origin and necessary validity. Thus it is in fact that we see time and space add themselves to the phenomena of sense, imparting (even in their own right and apart from other elements in the single realizing act) to these phenomena some such co-ordinating and subordinating conditions of necessity as are required. And thus, too, there is another reason for the phenomenal nature of the objective world which we seem to perceive around us; for, even if the so-called objects were objects in themselves so far as *a posteriori* sense is concerned, they could no longer be allowed to remain such, being under the necessity of subjecting themselves to the modes

of space and time, and so of reducing themselves to mere phenomena. So far, then, as both the nature of sense in general and the forms of our sense in particular are concerned, we can know only phenomena, not noumena —things as to us they *appear*, and not as in themselves they *are*. Nor is there any reason that this conclusion should dissatisfy: a phenomenal existence may be as consistent as a noumenal one; nay, as in the first instance probationary, it may have its own good ends. It does not at all follow, in fact, that objects are even illusory because, at bottom, only manifestations to sense, or only *appearances*. Rocks will still remain rocks to us, for all that, and as hard as ever; fire will still really burn, and water still really drown—only, in metaphysics, things must consent to receive their true metaphysical expressions.

All our knowledge, therefore, consists of two factors, and both are subjective; but the one, being *a posteriori*, empirical, sensational, is contingent, while the other, as *a priori*, transcendental, perceptional, is apodictic. What I call red, for example, or sweet, or loud, or smooth, is red, and sweet, and loud, and smooth only to me. It may be also red, or sweet, or loud, or smooth to you; but we cannot *know* that —even though we certainly *say* that. We all call our feelings, that is, by the same names; but identity of name is no clue to identity of feeling. What all other men feel to be red, I might feel to be green; but I should still call it red, for I should have no means of knowing that I differed in feeling from other people; and I should name it what they named it, both I and they being perfectly consistent in the use of the word for our respective feelings, however different these feelings might be in reality. In short, it comes to this: the *a posteriori* subjective states we

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have no means of comparing, and, consequently, cannot tell whether they are the same or not. No language can convey to you my feeling, or to me yours. Name them as we may, and name them as universally as we may, feelings are still, in point of fact, *inexpressible*, and consequently *incomparable*. But it is different with *a priori* elements: they are necessarily universal forms which are *perceived*, and perceptions can be compared, for they can be exhibited, their constitution can be submitted to process of intellectual inspection, and, consequently (with discharge of sensation), their fundamental conditions, principles, and laws compared. That the three angles of every possible triangle are without exception equal to two right angles, this—and the same thing can be said for every proposition due to the essential nature of the perceptive forms, or time and space—is not one thing to one man, and another thing to another: it is an affair of reason, and not of feeling; and while all that relates to the latter is individual and incapable of comparison, all that relates to the former is universal, and consequently capable of examination for assent or rejection by all of us. Thus, then, space and time, as universal and the only universal *a priori* perceptive forms, are seen to possess a certain intellectual nature, and to be capable of presenting themselves in universal reason. If, then, space and time, which subject all objects to their own conditions, be themselves subject to conditions of the intellect or the understanding, all objects whatever, outer or inner, must also (through them) subject themselves to conditions derived from the understanding alone. And this, indeed, seeing that our knowledge relates only to contingent appearances, we should also naturally expect as probable and even

necessary. For objects, at last, are obliged to relate themselves to the understanding—all objects must be understood; and it is reasonable to suppose that, in the process of the union of objects to the understanding, there will be conditions. Now, we have already seen the *a priori* conditions of sense, and we see here the anterior probability of the existence of correspondent *a priori* conditions (in perception) for the understanding itself: the search, then, for these latter seems, as the next step here, to be presently imposed upon us. That is, we ask for those *a priori* conditions of the understanding which (if any) necessarily attach themselves as a further modifying element of perception to all objects that, as perceived, have already submitted to the conditions of time and space.

Nor ought the general idea of what is essentially intellective becoming actually or empirically perceptive to prove a perplexing one. The influence of a notion on perceptions must have manifested itself to every one. In fact, we may say at once that *no* perception is complete until a general notion has conjoined itself to the multiple of sensation. And here we may remark that perception, even as perception, is either crude and elementary or finished and complete. Now, crude perception is a breadth of parts, a complex of particulars, a detail of items, a multiple, a manifold, a *many*—just as sensation is. Perception as opposed to sensation involves more than the mere *feeling* of the latter: it involves, besides the apprehension of elements into mere subjectivity, their apprehension as well into objectivity. Perception, as perception, whether crude or complete, primary or ultimate, is awareness of an *object;* and an object is always something that a subject conceives itself to discern as different from itself, but presented to it,

offered to it,—as it were, for inspection, held up to it. Perception, then, is the *sensible* presence to consciousness of such discernible elements as we call objective, or, indeed, just at once, objects. *Pure* perception, for example, has for objects the peculiar details of time and the peculiar details of space. So long as it is *pure*, it has, by way of contents, nothing else whatever. Now it may be seen at once that these *details*, though *sensible*, cannot be called *sensations;* they have not the character of sensation, mere feeling—the feeling of light, sound, etc.: they are discernments, awarenesses; they are to a certain extent intellective and cognitive; they are perceptive; they are perceptions. That is what is meant by the word *Anschauung*. Whatever has that character in it—beyond mere sensation—of sensible discernibleness, perceptivity, objectivity, is an *Anschauung*. But an *Anschauung*, a perception, is only crude and elementary when, as in the first instance, the sensible details of it alone stand before consciousness. We may conceive the details of time and space always to stand elementarily thus, from the first, and in the background, *sensibly* before consciousness. That is crude perception. Finished perception, complete perception, is more than that: we have then *an* object before us, a house, a ship, a cannon-ball, a cushion, a glass, a stone, the sun, water, ice, the air. And each of these we can see to consist at once of details of sensation, as well as of details of perception; but all combined at last into a single unity, which is at last, too, only a unity of *perceptive* details—the very sensations have become perceptions. This ought to make thoroughly intelligible what perception is as opposed to sensation; as well as, in opposition to crude perception, what is complete percep-

tion; and as well the one as the other. There is a temptation to speak of complete, in contradistinction to crude perception, as perception *proper*. This, in view of the completeness. But then, again, in view of the character of perceptivity as perceptivity, and with that only in our eye, we might call even crude perception, perception *proper*.

No matter of perception, then, is a simple; or it follows from the very nature of time and space that all such matter is a plurality, a multiplicity, a detail: all objects are multiples, consist of parts, of a variety of particulars, a many of details. Indeed, there is an element of variousness in the special senses themselves; for one and the same object may owe materials to each and all of them. Perception, then, while yet in its first crude form, as before sense in the mere details of time, space, and sensation, is but itself a *detail*—a detached and incoherent and unconjoined many. But were it to remain such, it would be incomplete; there would be perceptions, perceptions as it were in *blur*, perceptions in the raw, but not *a* perception,—a formed perception, a complete and finished perception. In order to the attainment of this latter, the detail, the blur, must collapse, so to speak, into singleness; the multiple must pass into a simple; the complexity and multiplicity must disappear into unity; the parts must unite into a whole; the particulars must eclipse themselves into a universal—that is, they must be *thought*, become *notion*. "For, as notions without perceptions are void, perceptions without notions are *blind*."

Suppose some new object be brought from abroad and put before you: you perceive it at once; and yet you confusedly feel that you do not perceive it. You confusedly feel this, in fact, till, on a sudden light, you exclaim, It is a basket, a drum, a knife, an oar,

a club, or whatever else. Now, if you recall that sudden light, you will find that it leaped from the collapse of the detail—the sensible many – into unity. What happened, indeed, was, that all the particulars of the perceptive detail, darkly and disconnectedly before you, sprang suddenly together into the unity and light of the universal –basket, drum, knife, oar, club. For these, so far, or though only empirical, are all universals; they are all notions, or the words themselves are general terms that involve notions or represent notions. The notion under each of these words, in fact, has an infinite variety of individuals under it; and is therefore a universal. When, one morning, the day broke, and all unexpectedly before their eyes a ship stood, what it was, was evident at a glance to Crusoe. The perceptive manifold collapsed for him at once into the unity and simplicity of the general notion, ship. But how was it with Friday? As younger and uncivilized, his eyes were presumably better than those of his master. That is, Friday saw the ship really the best of the two; and yet he could hardly be said to see it at all. He really did not *perceive* it –perceive it as more than a crude and elementary perception; he did not perceive it as a formed and finished perception. In short, what to Crusoe was *an* object, was to Friday only a dark and amorphous blur, a perplexing, confusing, frightening mass of details, which would not collapse and become single and simple to him. It can easily be understood that this single example applies to all cases, and that we really do not *perceive* until by the help of a notion we also *understand*. Has it never happened to the reader to lie in a strange bedroom, and to puzzle himself in the morning about some distant object which he was conscious he had known perfectly well the night

before, but which he could not put together for the life of him now? It is an object on a shelf, peeping out of a cupboard (say): *what* is it? What a strange-looking object it is! A formless detail of many perceptive particulars, an incomprehensible plurality of parts; but what is it? Ah! a candlestick, a family Bible, a bandbox, a general's battered hat, etc. The moment you recollect what you had recognised it to be, the moment the notion attaches itself, all is plain; and yet you are not a bit nearer, and see (*qua* seeing) not a whit clearer, than before. A man, of a morning, may look out of the window of a strange house, and, for full five minutes, have, to his astonishment, before his eyes a vast chaos of stones stretching over a great plain to the very verge of the horizon, which incomprehensible huge wonder will spring together at last into the very limited garden-wall he recollects to have seen the day before. This same principle it is that makes our ears so very opaque, to say so, in a foreign country. We think we should understand better did the people but speak louder; but the real want is that of notions. The natives are able to anticipate notions—from tones, looks, gestures, and single words; so that the whole rushes together intelligibly for them, even though they may not have actually heard every syllable that was enunciated. Of course, it is not to be denied that, whether for ear or eye, distinct apprehension of the sensible details is, on its side, an important factor towards readiness of perception. We see this in those who are dull of hearing, or who are short-sighted. Nevertheless, the latter, without one inch of increased propinquity, come often to perceive quite clearly and distinctly some incomprehensible blur into a familiar object, should they but stand still and wait for the notion.

And here some one may object that the blind, with all the notions in the world, never *perceive*. But that is not the case. A blind man perceives—is capable of *Anschauung*—quite as much as either you or I. His pipe, his knife, his loaf, is really very much the same *object*—*Anschauung*—to any blind man that ours are to us. But on this I do not dilate here. In further illustration, I add only that we see certain persons, women frequently, stutter and stammer and stumble fearfully in the attempt to pronounce some long, or for them new, word. How is this? They have been taught to read as well as others: what causes the difficulty? Simply the want of notions. These are mechanical, instinctive heads, that have not reduced syllables into principles of sounds; and so a long new word is for them a wholly unconjoinable manifold of perceptive details which, *with* such principles, with notions, that is, would have collapsed into unity and been comprehended at once.

It must now be pretty evident, then, how perceptions without notions are blind. As for the other part, that notions without perceptions are void, we may, probably, pass that as intelligible at once. What were the notion river, for example, or the notion justice, were it incapable of being filled and verified by perception of an actual case? Surely vacant! As for perception, once again, it may illustrate the point to reflect that the lower animals do not properly perceive. For many of these, objects are but blurs of perception in the raw to awaken aversion or desire. The dog that knows his master, doubtless, has combined a certain detail into a loved and feared unity; but the principle of this unity is, after all, blind; it is not a notion, not a universal,—though it certainly does duty for such, is a blind surrogate of such.

The notions which we have seen instanced are empirical notions—basket, oar, drum, etc. But, by taking objects more and more abstract, we shall perhaps arrive at such as are *a priori* and not empirical at all. This was our procedure with objects in search of the *a priori* of sense; and it is only reasonable to try whether the same process shall succeed with us here also. Here is a nail that I picked up to-day. To me the perception is complete, for I have united the perceptive details, through a general notion, into the single objective reference: it is a nail. But suppose I were a Papuan or original Polynesian, and had never seen a nail, the objective reference into which the detail would collapse would no longer be a nail, but simply a piece of iron; and the two perceptions would now be really quite different. Suppose, again, I had never seen iron, though acquainted with some other metals. The detail in that case would reduce itself to unity only under the notion metal. But suppose I had never seen a metal, and knew only solids and fluids, etc., the nail would be for me simply a solid. Suppose, now, I wanted to describe it and distinguish it from other solids, I should say it was blue, cubical, heavy, sharp-edged, pointed, etc.—in short, I should enumerate all the qualities in the object that presented themselves to my senses. Suppose, now, I withdraw all these qualities one by one, withdraw in thought, abstract from them, will the body wholly disappear? No, not wholly; there will remain over the space it occupied, which, as we have seen, we cannot withdraw, because it is a pure perception, an *a priori* object. But, besides this pure perception that remains over, is there not as well, and similarly situated, a pure notion? We said it is blue, and we remove blue. It is no longer blue. So with all the other

qualities which we have seen in the object; and with the result, therefore, that it is no longer blue, it is no longer heavy, it is no longer hard, it is no longer cubical, etc. But what is this *it?* Besides the qualities, we assume an *it* in which these qualities resided, a substrate in and through which they were thought to cohere. This *it*, this substrate, in fact, was the notion *substance:* the nail as a whole, its qualities apart, was to us a substance. But is *substance* an affair of sense? Is it of the nature of odours, savours, colours, etc.? Is it even of the nature of feeling? All the various *feels* which the body conveys to us through touch are sensations, and, as such, abstraction can be made from them; but still the notion substance remains behind, quite unlike all the qualities which were supposed to be grouped around it, and which it was supposed to support. It must, therefore, be *a priori*, and as it is not a perception, it must be a notion. There is no conclusion possible, consequently, but that it is, in some way or other, an *a priori* result of the understanding itself, of pure understanding.

In this way we come to have a glimpse of the possibility of *a priori* notions which shall reduce perceptive *a posteriori* details, under subjection to the *modi* of space and time, into the unity of a single objective reference, and that is, into an object or objects as such. But the very idea of such is at once suggestive in regard to causality. Possibly, that is, the very question from which we start will find its answer here. The principle of causality, then, shall depend on an *a priori* notion. On the appearance of the cause A, the necessary and universal expectation of the effect B shall depend, not on my habit or custom of seeing A and B together (which amounts simply to empirical suggestion, and is altogether inadequate to

supply an absolutely necessary and universal copula), but on a law of my understanding itself, to which A and B are reduced and submitted as empirical examples, and by which they become for us, with rigorous necessity and absolute universality, objectively connected.

It will be worth while to spend a word here on the precise meaning of the term *objective* as just used; for it may be objected here that, after all, the principle, the new principle, being still *in us*, is necessarily subjective. This is true; that is, so far as said principle arises from our own constitution, it is to be admitted to be subjective. Indeed, according to our theory that the *a posteriori* can reach no further than to the excitation in us of empirical feelings, such further principles of modification and connexion must be, and can only be, within—subjective, then, in that reference. What we call the objects-in-themselves, things-in-themselves, are only adequate to the contingent sensations which, through eye, ear, etc., we are conscious of being set up in us. These sensations themselves, consequently, are henceforth in us; so that any further manipulation of them, as also within, is, in that point of view, necessarily subjective. Nevertheless objects, though we know nothing of objects in themselves, still *are;* the term has still a meaning for us, and is of unavoidable use, even in a phenomenal view of the nature of things. We do not call what is immediately due to the object-in-itself—we do not call the sensations objects. To be called objects the sensations must coalesce into single perceptions. A single perception that reduces into its own unity a variety of sensations, or, looking to the pure forms of space and time, a variety of perceptions, is an object. The variety, in fact, as we have seen, collapses into unity

through an objective reference which is conditioned by a notion. It is combination, then, conjunction, union, that is constitutive of the object; and these processes depend on principles within us, which, therefore, are, in origin, subjective. It is with reference, then, to the *combination*, that the terms object and objective come in. The distinction, in truth, turns wholly on the word *reference*. All that we know (as we cannot know the object-in-itself) is, in effect, subjective. Still all that we know has *either a subjective or an objective reference*. A subjective reference concerns only what I *feel*, what the particular subject empirically feels, experiences; but an objective reference is the conversion (through insights both of perception and understanding) of sensuous details into unities (called objects) that seem thus to separate and differentiate themselves from the subject. It is the perceptional forms (space and time) and the notions of the understanding (categories) which convert the sensuous states of the same subject to which these forms and notions belong into objects. It is also plain, too, how what is objective can, as capable of exhibition or expression, be compared, while what is subjective must always rest individual.

Our theory, then, is that objectification of the sensuous details depends (must depend) on mental process within. This process, as essentially synthesis, or of a synthetic nature, can never belong to sense. Sense is passive only, it receives, it takes on only what impression is made on it; but the understanding is active; it reflects, it examines, it goes to work, it operates change. Union, combination, connexion, synthesis can, then, never belong to the receptivity of sense, but may and must to the spontaneity of the understanding. The understanding, now, acts through

notions; and it will be therefore these that effect synthesis. These notions, again, as it is plainly not the receptivity of sense that gives them, must be presupposed as already in the mind—as already in the mind for accomplishment of the function of synthesis in question. But we have already arrived at a clear conception of all this, both as regards the reductive (or redactive) power of notions, and the actual *a priori* existence of some such; *e.g.*, substance and the principle of causality. What we seem to require now is some means of arriving at a full catalogue, at a complete tree of these notions. For it is evident that we must have a guarantee of completeness here, else our whole business fails. Besides a guarantee of completeness, we must have also, however, one of legitimacy or authenticity. We must possess grounds of absolute certainty in asserting that such and such are the *a priori*, and that such and such are *all* the *a priori* notions, that function unity of objective reference (objectification, objectivity) for all possible sensuous details,—these details, moreover, being assumed to have been (at least potentially) previously disposed in, and according to, the pure perceptive forms of space and time. Such guarantee (grounds) we might name an *architectoric* principle; for it would underlie creatively the whole structure that rose from it. Such principle, then, must be the object of our special quest now. But we are supposed to have the clue and guide to our whole general quest before us, and the same clue or guide must be supposed adequate to every partial and subordinate quest. We were led, for example, by the fact of the presence of apodictic truths in matters apparently quite empirical to conjecture that there were two factors in all knowledge (perception): one empirical proper and due

a posteriori to the impression of objects-in-themselves, and another, empirical *de facto*, but not empirical *de jure*, empirical in fact, that is, but not empirical in origin and authority—due *a priori*, therefore, to the operations of the perceptive or cognitive faculty itself. So led, we were further led to believe that scrutiny of the faculty itself would yield to sight the peculiar additions which its operations contributed to the empirical whole, the whole of experience.

An analysis of the faculty, then, was therefore suggested; and to the divisions of this faculty, universal or general logic (an admitted pure science from which all empirical elements were certainly eliminated) was adopted as guide. Under this conduct we have already advanced well as yet; and there is no reason why we should discard it here, especially as what concerns us now is wholly the understanding (the more particular object of logic), and not sense. The function which we are examining now, the reduction or redaction of a complex of sense into the unity of a notion, is wholly an affair of the understanding; and, inasmuch as the understanding itself is a unity, we can anticipate a like quality for the principle in demand. Could we but find, indeed, all the functions, all the *modi* of the understanding, we should then, as we are now warranted to assume, be at no loss for all the subordinate forms of what principle we seek. Our first object, then, is a complete table of the functions of the understanding.

Now, what is the understanding—what do I mean when I say I understand a thing? We have already seen, in reference to the illustrations adduced of the necessity of the addition to the perceptive detail of the unity of a notion, that the understanding was a necessary element or moment even in the everyday

seeing (perceiving) of objects; that at all to *perceive*, it was necessary to understand. Understanding, then, in all the examples alluded to, is seen to consist in the uniting of a perceptive complex into the single whole of a universal notion (and then only it is that we *perceive* the perceptive complex itself). That is, there was no understanding possible until the class, the universal, was found, of which the perceptive detail was only an example, only a particular. All the objects from abroad, for example, or those that peeped perplexingly from the cupboard, or the unintelligible quarry of stones—not one of these was understood, not one of these was—literally—*perceived*, till we found the class of which each was an example, basket, oar, club, brass candlestick, cocked hat, wall. The process by which these were found was thinking: we did nothing all the time we were longing to perceive but gaze and think, though the thinking was but an obscure *nisus* till, with a light, the thought wanted, the notion, sprang to us. Understanding, then, is so far identical with thinking, and both relate to notions. Thought and understanding, that is, are both discursive and proceed by notions. Again, judgment or judging is a faculty that proceeds by notions, a faculty that compares notions, joining and disjoining them. Judgment or judging, then, is but another name for the understanding, or for thinking. Was it not, in each case of the adduced perceptive details, an act of judgment that added the notion? Was it not an act of judgment that found out the class, the universal, to which the particular or detail in question belonged as an example or instance? To understand is to think, then, and to think is to judge. In fact, it will be found on trial that no example of thought or understanding can be taken up that will

not demonstrate this. For instance, some one, putting one hand over my eyes, brings with the other my fingers into contact with a certain body. Well, I am puzzled for a moment. It is an unknown variety, an unknown detail, an unknown many; but, on a sudden, all becomes one, and I shout out, Water. Now, was it not at last by an act of judgment that I was able to identify the variety at the point of my fingers as water? Here, then, in the formation of a single notion, we find judgment necessary, as well as that its act or function consists in the subsumption of a given variety under a certain known universal or class. To take more complicated instances, what is it to understand the theory of heat, of dew, of the heavenly bodies? Is it not to attain by judgment to the reduction of a variety of particulars to the simplicity and unity of a co-ordinated and subordinated whole of general or universal notions? Or, once more, what is it to understand the universe? Is it not to discover an ultimate principle (God, the absolute) under which we may subsume the infinite all of things? And what faculty subsumes the lower under the higher but judgment?

We do not notice the respective domains of understanding, reason, etc., that are shadowed out here, but we say again that a complete table of the functions of the understanding is evidently our special quest at present, and that by means of such table there is every likelihood of attaining to the recognition of the totality of pure notions. But, further, understanding being judgment, we know that logic treats of judgment. Logic, certainly, at least classifies all formal judgments. Now, are not all possible formal judgments just, in so many words, all possible forms of judgment, and are not all possible forms of

judgment, just, in so many words again, all possible functions of judgment? But if general logic catalogues all possible functions of judgment, we have seen already that we may, on its part, safely accept as much, for, admittedly, general logic has nothing to do with the matter, the *a posteriori*, the empirical element, of thought, but only with the form, the *a priori*, the pure element, of thought. General logic, too, has existed for 2000 years without suffering either diminution or increase; and, in its regard, therefore, we may positively rely on the presence of correctness, completeness, and sufficiency. Judgments, then, purely regarded, will be found to possess in logic Quantity, Quality, Relation, and Modality. In quantity, judgments are either universal, particular, or singular. In quality, they are either affirmative, negative, or indefinite. In relation, they are either categorical, hypothetic, or disjunctive. And in modality, they are either problematic, assertoric, or apodictic. It is necessary to admit that this classification is not absolutely identical with any of those that may be met with in the usual treatises. Still we dare assert that an examination and comparison of all that is ordinarily treated of in general logic as concerns judgments will justify us in the assumption of the classification we propose, and will show that, while we have essentially neither added nor subtracted, we have, by greater scientific rigour both of distinction and association, possibly, or probably, in no small degree, improved. Well assured ourselves as regards accuracy and adequacy, we deem it unnecessary to retard our main inquiry by any formal analysis and justification in this place, but simply proceed.

Now what is the general function of a judgment

according to logic? When we say, for example, all bodies are divisible, what mental process is indicated by the assertion? I have certainly conjoined two notions: I have asserted the one of the other. But for what reason? Evidently for this reason, that the one notion, divisibility, is implied in the other, all bodies. Now, that is to say that I analytically found this, for to bring several ideas under one is an analytic act, depending on process of abstraction and generalization according to identity. But this same sort of reason, and similarly constituted, obtains throughout all the other judgments, under whatever name classified. Judgments, in ordinary logic, therefore, are analytically applied, and in regard of notions. Still the action itself of each judgment is a synthetic one; for even the disjunction of negative judgments involves synthesis with an opposite. All forms of judgment, then, are various functions of synthesis, which, logically, are analytically applied, and between notions. But may not these various functions of synthesis be conceived capable of being otherwise applied?

Any object, as first apprehended in consciousness, is but a plural blur of parts, of units of sensation and crude perception. This is their condition as received into imagination. But imagination is productive and reproductive, is capable of movement, is capable of movement among these units. It is capable thus of recognising them, mustering them, comprehending them, and, under the unity of self consciousness, to a certain extent, performing (in connexion with time and space, which also lie in it) synthesis upon them: it gives them *continuity*. Such synthesis, however, would still be contingent and subjective. There seems still required something else to bestow objectivity and necessity. Now may not that something else be

extended to us precisely by these various syntheses of the functions of judgment? The question, then, is this, May not the same functions of judgment that act analytically in logical application to notions be capable of a synthetic action when perceptively applied to the complexes or manifolds of sense? The perceptive units are a disjunct plurality received into the mind, and there are at the same time functions of unity in the mind; but, pluralities received into unities, affections received into functions, why should the latter not grasp and unite the former? In the three classes of judgment, for example, that involve union, connexion, with reference to relation, is it not conceivable that the categorical function, or the hypothetical function, or the disjunctive function, may act in uniting, not mere notions analytically as in the reflection of logic, but the actual facts of experience synthetically as in the perception of sense? The categorical judgment, as we know, expresses a direct relation between the subject and the predicate; the two notions are there directly or categorically related. We see, then, that categorical relation is a function of the judgment or the understanding, and is it inconceivable that this function should relate itself, as well synthetically to a perceptive variety already offered to it, as analytically to a notional variety similarly offered? Is it impossible to conceive two facts of sense which, operated upon by the function in question, would reduce themselves into a relative or correlative unity? Categorically to attach predicates to subjects is really to affirm *qualities* of *substances*. The formal function of thought, then, implied in the categorical judgment is the relation of subsistence and inherence, of substance and accident. This being a formal function of judgment,

a rule of synthesis, it is evident that, a complex of sense to suit being introduced into it, such action will follow as shall exhibit, sensuously, perceptively, in actual facts of experience, an example of this function, a case of this rule; but an example withal, a case withal, which, however empirical, however much a matter of mere sense, shall possess, nevertheless, all the universality and necessity of the intellectual insight that lay in the general function, that lay in the general rule. Again, in the hypothetical judgment, the relation is between two propositions, and all that is involved is the truth of the consequence. If there be perfect justice, the hardened sinner will be punished: we see that what is concerned here is a *vis consequentiæ*. It is not the truth of either proposition that is considered, but simply that of their relation, simply that of the copula between them. But this is an original function of the intellect, and we may certainly conceive some suitable complexion of facts reduced under it; in which case what would result could, manifestly, be only an example of cause and effect—*perceptions*, now, not *notions*, with a *vis consequentiæ* between them, which should be universal and necessary. As the ground or reason implies its consequent or result, so the cause implies its effect. Things thus, quite empirical themselves, and, consequently, quite contingent themselves, may quite well bring with them in their relation the necessity and universality of an intellectual insight. Of course, it is still evidently a necessity that the sensuous complexion should, as said, *suit*—the intellectual ratio that is; else subsumption were inconceivable. But how this takes place we know not at all—how objects should present themselves in such synthesis or complexion as brings judgment to act upon them, and

reduce them to its universal rule, we know not at all. Why this tree has its particular shape is quite unknown to us; still it has to conform to the general laws of space, and present itself in length, breadth, and thickness. So, what may be the nature of the object in itself that underlies any empirical complexion, as of magnet and steel, spark and powder, etc., is absolutely hidden from us; we only know that it is such as to be necessarily subsumed under the function of judgment that concerns the *vis consequentiæ*, and comes forward, consequently, in the duplicity of a correlative cause and effect, with the necessity of intellectual insight imparted to it.[1]

A similar train of thinking will, we doubt not, bring the reader to see the legitimacy of all the other members which, as principles of perceptive synthesis, we seek to deduce from, and place parallel to, the various affections, quantitative, qualitative, etc., of the logical judgment. These principles we name categories. Under quantity, there will correspond to the functions or affections of the judgment which we have already seen, the categories of unity, plurality, and totality. Under the other rubrics, quality, relation, and modality, we shall similarly have the categories, respectively, of reality, negation, limitation,—substantiality, causality, reciprocity,—possibility, actuality, necessity.

After what has been already said, there will be little difficulty in understanding that these categories are but the various affections of the logical judgment which we usually find in the ordinary text-books—these affections, regarded as functions of unity, and conceived to be synthetically applied in reduction of

[1] I shall be found again, in the above, to be attempting to meet, suppositiously in the spirit of Kant, my own objections to Kant.

correspondent sensuous complexions (said complexions being, as must always be borne in mind, only subjective affections, feelings, or perceptions, of our own within us): they are notions substituted for the individual moments of each *general* logical function—pure notions of the understanding, that would arise from said functions, in their various moments, being applied synthetically to the sensuous or perceptive complexions of experience. Under quantity, the setting of totality and universality, of plurality and particularity, of unity and singularity, as parallel respectively the one to the other, will, presumably, present no difficulty. The analogy between affirmation and reality is equally obvious. Negation is alike in both tables. Then the function in an indefinite proposition is really one of limitation. The soul is not mortal, for example: what I have really accomplished here is only a certain limitation; the sphere predicable of the soul is limited by the proposition; a limit has been set down exclusive of everything that is mortal. The peculiarity of the proposition is, that we have veritable affirmation produced by a negative predicate. That the problematic pairs with the possible, the assertoric with the existent or actual, and the apodictic with the necessary, may also be accepted at a glance. The two first moments of relation we have already discussed, and there remains for our consideration only the production of the category of reciprocity by function of the disjunctive judgment.

This, also, is easily made clear. Take the disjunctive proposition, The world exists either through blind chance, or inner necessity, or an outer cause. It is evident that these three clauses constitute a sphere, a whole sphere, and that, for exhaustion of

this sphere, completion of this sphere, any one clause is necessary to the others. It is also clear that the acceptance of any one clause is the exclusion of the rest, or that the exclusion of any two clauses is the acceptance of the third that remains. In short, a mutualness or reciprocity of action and reaction is evident among these clauses; and there can be little difficulty in conceiving that such an intellectual function as is there involved, being applied in correlation of phenomena, would educe the category of reciprocity between the active and the passive.

In fact, we have but to reach the one general idea concerned in all this, to reach also the central insight not only into the nature of a transcendental logic, but into that as well of our whole inquiry, and, very specially, of our answer to Hume. The same understanding that, by its system of functions (judgments), analytically conjoins notions, avails to introduce, by the same functions synthetically, necessary objective conjunction and connexion into the perceptive details of sense, as present in consciousness whether generally (space and time) or specially (actual sensation). This is the key-conception of the entire enterprise, and what concerns pure or general sense is but corollary and complementary. This is the answer to the *Quid juris?*—this is the explanation of all apodictic validity, whether empirical or other.

What we have desired to do, then, we hope will be now clear. We have found out the various functions of judgment or the understanding; and we have seen that the operation involved in each is a synthetic (a conjunctive or conjoining) unity. We have decided, too, that the whole business of sense is limited to receptivity, while synthesis, combination of any kind, can come from the spontaneity of the understanding

alone. Then we have perceived that the *a posteriori* elements of our knowledge (and these constitute the great bulk of all and any knowledge) are but contingent affections of our sense, whose correlative objects-in-themselves (if any) are wholly denied us; which affections, then, on being received within, require from within the aid of the regulating function of fixed and necessary principles. But just such capability of reducing a variety, a multiple, a plurality, a detail, a complex, a multiplex, a manifold, of sense we discovered to be contained in the functions of judgment; the consequent *notions* due to these functions, when synthetically applied to any manifold, readily suggesting themselves. There, then, is the want; and here is what is necessary for the supply of the want: what more reasonable than to bring the one to the other, and transform into the unity, and simplicity, and order of a connected and articulated whole of experience, the infinite *a posteriori* variety, by means of a certain number of original patterns, rules, or standards, under which judgment, with its own necessary insight, should subsume it? What more reasonable than such conception? What other source or explanation can we find for that peculiar *jus*, that apodictic validity, which is certainly present for us, not only in what are called the pure sciences, but just in the ordinary facts of our current, hourly experience? How otherwise can *affections* that are within be subjected to law, than by *functions* that are also within? Consider, too, the success of the undertaking. With these categories and the two general-sense forms, we really exhaust the whole field of the apodictic. Any other apodictic principles, namely, will readily subordinate themselves under those primary ones, taking up the

position of derivatives; to which, whether springing from union with one another, on the one hand, or with the forms of sense, on the other, we desire to give the name of *predicables*. Such are power, action, passion, origin, decease, alteration, etc.

As for the primary principles in allusion, we call them categories or predicaments, in view of the relation which they bear to the so-named classes of Aristotle. These, however, unlike our own, owe their origin to no systematic principle, but seem to have been caught up and set down rhapsodically, as it were. Now, no bare estimate of some such mere mechanical aggregate, gathered, too, and finished, as it might be, at hap-hazard, will, evidently, at all avail in such a case. On the contrary, we must have the systematic guidance of a common principle, and in such manner as to have a voucher or guarantee of the perfect legitimacy and exhaustive completeness of all the members or elements which shall distribute it. Such principle has been found for us in judgment. But the predicaments and post-predicaments of Aristotle will be found to constitute a mere indiscriminate medley: some are not pure, as motion, for example, and some relate to sense, as where, when, etc., or, like action and passion, are merely derivative.

The great objection of the general reader to our rationale in explanation of apodictic validity of synthesis will probably concern the empirical peculiarity in form and connexion of the objects themselves. It will be felt, for example, that the reason is not in me, but in the objects themselves, why one, a stone here, has this shape, and another, a stone or a brick there, has that one. So, in the series of cause and effect, it will be felt that we cannot dictate the terms of it,

and that, consequently, it has a necessity of its own. And again, it will seem very unnecessary to make the notion quantity depend upon an internal principle when we have just to use our eyes to see it before us in the objects themselves. As for quality, the general reader will probably think it absurd and quite supererogatory to make an *a priori* provision for a matter that can only be known *a posteriori*, and that *is* wholly *a posteriori*. These are the difficulties of uninitiated empiricism, however. Once for all, were it with things in themselves that we had to do, we *could* have no *a priori* knowledge whatever. In that case, to have any particular knowledge, we should simply have to wait for the presentation of every separate object; and all and any knowledge, consequently, would, as after the fact, be simply *a posteriori*, and, as *a posteriori*, necessarily only empirical and contingent. But as we can perceive only through affections of sense and forms of perception, and think only by notions which relate to objects through these affections, we can neither perceive nor think things in themselves, but only phenomena, only appearances. As also we do possess elements of knowledge apodictically necessary and universal, it is evident that we are not limited to an *a posteriori* knowledge, but possess also such as is manifestly *a priori*. This *a priori* knowledge is found to unite itself to the *a posteriori*, and to effect there results of the most excellent and, indeed, indispensable nature. The *a priori* and the *a posteriori* are found to be mutually correlative and complementary, so that either by itself were inane and futile. It stands to reason, then, that the contingent *a posteriori* requiring an element of necessity, such element is provided for it in the apodictic *a priori*. Nor, indeed, is there anything

easier—the phenomenal nature of the *a posteriori* and the consequent necessity of an apodictic *a priori* being borne in mind—than to clear away all the special objections we have mentioned.

It is quite conceivable that the particular form of affection set up varies with the object in itself; but, though this form takes up a certain length and a certain breadth and a certain thickness in space, it does not follow that length and breadth and thickness themselves, as such, come from the object in itself at all. Were it so indeed, then, manifestly, elements of apodictic necessity (quantities) would spring from experience, which is quite impossible. So as regards the particular causal form set up—for the particular complexion is but a particular affection—it is quite intelligible how the particularity might depend on the object in itself, at the same time that the general *vis consequentiæ* should not come, nor be able to come, from the object in itself at all; for did it so come, *a posteriori*, that is, it were self-contradictory to affirm necessity and universality of the relation at all. Surely it is conceivable that the peculiarity of the object always induces a peculiarity of modification in our sentiency, and that certain modifications are in such complexion (why, of course, depending on the object in itself, we know not how) that we subordinate them under the relation of antecedent and consequent, or cause and effect. Nay, it is not even necessary that we should always couple (or categorize) rightly; what we want to do is only to show, when we do couple rightly, the origin of the necessity that then obtains.

The particular form or complexion that adjusts itself so and so in time and space must depend upon the object in itself; but it obeys the forms of time and space, as such, and it is reduced to unity by the

power of an original pure notion of the understanding, that is quite general and universal, be the particular what it may. The object in itself giving rise to the peculiar modification or complexion of our sentiency that arranges itself so as to invite the action of the category cause, we know not at all; we only know that this category, so manifesting itself, is a general function of judgment under which the modification or complexion is subsumed into an object, as simply a case of the rule. So it is as regards quantity: did we derive the conceptions as well of quantity in general as of unity, severality, totality, etc., from things without us, these conceptions would not have an apodictic, but only a comparative universality. It is not so certain, either, that these notions could be so derived: the sensuous procession can be conceived to pass before us perfectly well without suggesting any thought of causality, or even of quantity. There is nothing supererogatory, then, in making provision in the mind for such principles in articulation of the phenomena. Being, indeed, of an apodictic nature, they cannot be derived from experience at all, but must be *a priori*. Nor is it differently situated with quality. We possess sense, and every affection of that sense *is* quality; and reality, negation, limitation, can be very readily seen to reconcile themselves to what must be the absolutely pure and universal moments of sensation; for it is evident that every sensation has elements that correspond to these moments of quantity; and there is nothing absurd in providing *a priori* necessary distinctions for the classifying of sensations themselves.[1]

[1] As said already, I conceive myself to answer, in the above, my own objections to the scheme of Kant, and in the spirit, presumably, of Kant himself. Elsewhere it will be found that I hold in the end by my own objections, and that I reject, consequently, my own answers.

The reader by reflection will perceive that our great levers of argument are—1, the phenomenal nature of objective knowledge, and, 2, the fact that we do possess apodictic synthetic principles. These levers he will do well to use for himself. Still, we hope to accomplish conviction for every reader by the end of the following Book, in which it will be found we subject all our materials to a final examination, and articulate them together into a systematic whole of such perfection and completeness as ought to go far to prove itself.

Such, then, is the nature of our deduction—a deduction of the peculiar *authority* which certain facts apparently in experience seem to challenge (*deductio aut declaratio aut explicatio juris*)—a transcendental deduction, therefore, which can expect success for itself only in investigating the *a priori* elements even in empirical perception. That of Locke, on the other hand, we may name an empirical deduction of the *fact* (*deductio, declaratio, explicatio facti*); which, indeed, can present no difficulty, as experience is nothing but an aggregate of examples of the principles sought to be explained. In this, however, it never struck Locke that he was providing a genealogy for *all* facts of knowledge which, in the case of some of them, would prove quite inadequate to the dignity of their pretensions and the wide sway of the powers they arrogated; for no mere physiological theory can account for the existence of those principles named apodictic synthetics.

Nor, it may be remarked, was Reid one whit more successful. Hume pointed out a principle bringing with it a peculiar claim, which claim he demonstrated, on the principles of Locke, to be incompetent to it. Reid rose in wrath and defended the instincts

which were implanted by God. But this for answer is simply Hume's own. He emphatically recognised the natural instinct; but if there was to be a reason for the necessity of insight which we all acknowledged to lie in it, then he challenged the production of it. This, however, would seem to have escaped the notice, not only of Reid and his followers, but of everybody else as yet.

Our explanation, then, is such as endeavours to meet Hume's question really as it was meant: it attempts to produce the reason, the insight, by and in which the mind makes always a necessary transition from the effect to the cause. Our explanation, in effect, does more than this; for it converts the one of Hume into the all of truth; or, in other words, it universalizes Hume's single proposition, and ushers universal mankind, through the doorway to which Hume led up, into a mighty, marvellous, undiscovered region, in which are seen the fixed foundations of the whole huge universe.

Book II.—Judgment.

[Ending precisely where the translation and the commentary end, this Book would seem, if exhibited *in extenso*, quite excellently calculated—by completion, to wit, of a threefold statement—exactly to accomplish the purport of the volume as an explanatory text-book. The relative explanations, however, run out into so great a length, and I have already so profusely discussed elsewhere the particular subject principally concerned, that I feel induced, if for nothing but the printer's paper (to say nothing of the reader's patience), to confine myself here only to certain extracts—to such extracts, namely, as shall seem light-giving in themselves, or, especially, as shall bear to defend the main principles of Kant from my own adverse criticism.]

The object of our inquiry is, as we have seen, How

are *a priori* synthetic judgments possible? Or how, as we may otherwise put it, is it possible for us to add to a subject, in independence of experience and absolutely *a priori*, a predicate nowise already implied in the subject, and not possibly deducible from the subject by any process of analysis whatever? How is it possible to affirm something of something else (B of A, for example), unless we have *learned* the connexion—learned it either from experience, or from analytic consideration of the state of the case? How is it possible, that is, to affirm B of A without the aid either of experience to try the fact, or of analysis to demonstrate a presupposition? How is it possible to affirm apodictically and yet synthetically? To the trenchant distinctness implied in these questions we have been gradually conducted by a minute analysis and ultimate generalization of Hume's problem in regard to the relation of cause and effect.

No previous investigation of any cause whatever (A) will suggest to the investigator any effect (B); and no investigation of any actual nexus whatever as between a cause A and an effect B will ever suggest to the investigator the *reason* of this nexus:[1] how,

[1] These, of course, are the assertions of Hume; and they have been universally admitted and adopted since Hume, not only in this country, but I suppose in all others. In this country, however, the first note in controversion (so far) of Hume was sounded in the second edition of my *As Regards Protoplasm*. The fulcrum of my controversial effort was there referred to a suggestion of Hegel as to identity in instances of *finite* causality. The suggestion is perfectly distinct in Hegel; nevertheless, as it does not in the least appear to be Hegel's special theory of causality, but to have distinctly, rather, the character of a partial remark, it has pretty well escaped notice and been allowed to pass by. I was happy to observe, on consultation, that Erdmann makes the identity peculiarly prominent: it is express in Rosenkranz, too. Still, neither by Erdmann nor by Rosenkranz, and quite as little by Hegel himself, has the suggestion, to my mind, been carried home, as it were: it is not by any one of them regarded in connexion with the statements of Hume. I am told that Mr Lewes had observed the reference in my *As Regards Protoplasm*, and had

then, is it that we attribute B to A—or how is it that on the appearance of A we always expect B?—and this apodictically, or by rigorous necessity and with absolute universality?

To this Hume and Reid gave each his own answer, both being in effect identical. We, for our own part, postpone our answer till we have looked about us over the whole field implied by the question. Is Hume's problem founded on a fact, and, stated quite generally, what does that fact amount to? The fact is unquestionable, and the ultimate generality it may be raised to is this: It is a fact that we apodictically aver things which are neither inferential from experience nor demonstrable to have been *a priori* implied. They are not inferential from experience, for they are set forth as apodictic affirmations; and to these experience is wholly incompetent. They are not demonstrable to have been *a priori* implied, for no analysis can deduce the one from the other. The general fact, then, is evidently of a very unusual and interesting nature; and it imports much that we should thoroughly understand and come to be fairly at home with it. Were it to be demonstrated by experience, the process of proof would be of the nature of a synthesis; that is, we should see from experience,

then, without note or notice, bodily carried it across into his *Problems*. If Mr Lewes did so, it was probably because he was perplexed between what was to be called specially Hegel's and what possibly mine in the matter. If the thing were current among Hegelians, it would not do to speak of it only in my reference, etc., etc.! I am prepared to show, however, from widely-separate passages, and in widely-separate philosophies, that identity as the link of causality was, overtly, expressly, ostensively, the doctrine of the Hindoos. There is no doubt whatever that Hegel made his relative remark in consequence of what he had seen in them. Mr Lewes, if he had known all this, would have still known that, as concerns this country, as concerns a full explicit consciousness, as concerns Hume, there was at least some little suggestion of merit, even at last on my part.

from actual fact, that B attaches synthetically to A; or we should just learn from experience that A and B together constitute a synthesis in actual fact. Were it to be demonstrated to have been *a priori* implied, the process of proof would be of the nature of an analysis; that is, we should be able to see from intellectual trial that B was analytically implied in A. Now, without either the synthesis of experience, or the analysis of reason, how can we possibly pretend to any such knowledge? We cannot attain to it by experience, and, consequently, we are excluded from all possible *a posteriori* process, whether synthetic or analytic. We cannot attain to it by *a priori* analysis, and therefore we seem wholly cut off from any possible approach to the fact, whether *a priori* or *a posteriori*. Must we, therefore, cover up the mystery from our eyes by simply writing over it "*instinct*"?—sceptically with Hume, dogmatically with Reid; indirect and *a posteriori* with Hume, direct and *a priori* with Reid (not but that Hume's "instinct" here is absolute enough and *need* not be seen to *rest* on his "*custom*"). Ah, but do we not see that, if, as regards the *a posteriori*, we are excluded from synthesis as well as analysis, the case is quite different with the *a priori*, where as yet only analysis is spoken of, and we are still free to put the question, But how of *a priori* synthesis? May not we ourselves, may not our minds, may not our separate faculties, have power to add—have power synthetically to add predicates to possible subjects, which predicates were neither already implicitly contained in said subjects, nor such as could possibly have been determined by any experience whatever. This, then, is the ultimate theme of investigation: Intellectual *a priori* synthesis; its nature, conditions, and limits.

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Of the existence of such we are not now permitted to doubt; for causality alone lies there before us, clear, obvious, undeniable, in the great highway. Our inquiry, then, has narrowed itself to the *a priori*, and, closer than that still, to the synthetic *a priori*. In fact, if there is to be an *a priori* at all, there must be a synthetic such; for the analytic *a priori*, depending on a process of regression, would be speedily exhausted by said process itself, were it not supported at last and definitively on *a priori* synthetic facts; for it is evident that the regression of analysis must end in an ultimate fact that is either *a posteriori* or *a priori*. Be it *a posteriori*, it has no relation to our inquiry; and be it *a priori*, then it is synthetically so, for the analysis is by supposition terminated, and it has no other possible termini than these named. The ground-fact, then, for metaphysical, or even psychological inquiry, is—The possibility of *a priori* synthesis; and that amounts to—The possibility of principles of necessity and objectivity towards such subjective sense-experience as this of ours. On the principle of causality we judge that B belongs apodictically to A: this judgment we cannot found on experience, for experience is only contingent; neither can we found it on any *a priori* analysis of A, for the notion B is by no means implied in the notion A: it must be founded, therefore, on *a priori* synthesis—the judgment that affirms B apodictically of A founds on a principle of synthesis *a priori*. To exhaust and complete our whole subject, consequently, we have simply exhaustively to demonstrate and tabulate all such principles.

But how and where to find these principles can present no difficulty; for they are *a priori*, they are products of the mind, they are contributions

of the faculties, and will give themselves to view should our process in consequent analysis be but exact enough. And, indeed, we have already accomplished this; for, of the two complementary factors of knowledge,—sense, by which objects are materially given, and understanding, by which objects are formally construed,—we have now discovered all the *a priori* contributions, and by means of processes in regard to which, on the score of infallible accuracy and exhaustive completeness, we are not permitted to doubt.

The possibility of *a priori* synthetic judgments, then, is seen to depend on the existence of certain universal and *a priori* forms both of sense and understanding; those of the former being pure perceptions (space and time), those of the latter pure notions (the categories). It remains for us to see how the *a priori* synthetic judgments themselves result from the union and combination of said pure notions with said pure perceptions. For it is natural to suppose that, the mind once for all containing pure notions and pure perceptions, these will not remain apart, but, the former subsuming the latter, a system of *a priori* judgments will result—a universal schematism—to the conditions of which the whole subsequent wealth of the *a posteriori*—chaos else—will be obliged to submit itself.

For it is worth while remarking that the nature of a judgment is by no means accurately specified by affirming that it is the comparison of two ideas, unless the correlativity of these two ideas be also specified. These two ideas, in fact, are always correlatively so situated that the one is higher than the other, and that, by consequence, the latter is subsumed under the former. There is, in truth, no judgment that is

not the subsumption of a particular under a general. In this process, however, judgment itself, the faculty, exercises a merely formal function: it is simply the operating power, the agent that, plying between two things (*a* and A), brings the one to the other, but discriminatively so,—that is, in such wise that the mere example or particular case *a* is reduced or subsumed under the general principle, law, or rule A, and not *vice versa*. It is as if it were thus: Sense supplies an infinitude of particular cases, understanding a finitude of rules, and judgment, in exercise of its discriminating and associating function, subsumes the former under the latter. It is thus easily seen how, as indeed belongs to the proverbial wisdom of all times and of all peoples, judgment is a faculty that is strong or weak just as given us by nature. Instruction, books, schools, etc., may, in a thousand different ways, make us thoroughly acquainted with the rules, but still it depends wholly on our own particular judgment whether we shall subsume under the rules truly or not. Every medical man knows well enough, by name and nature, all the possible genera and species of disease; but it is not every medical man can rightly subsume the case of each particular patient.

It does not follow, then, that, if only cognisant of the rules of the understanding, judgment will forthwith duly subsume. To that there is necessary a certain peculiarity in the faculty itself. No rules can guide what is itself the art of using rules. Or the rules lie there before judgment, which, as concerns choice, action, without assistance from them, is left to its own self and its own powers; a mighty source of difference between man and man is herein indicated.

The general conception so far is that, the pure

forms of perception in the peculiar varieties of their characteristic details (units side by side, units after one another, etc., etc.), as on the one side, being subsumed by judgment under the pure forms of understanding, as on the other side, there will result a primitive, pure, *a priori* mental schematism, subjacent to, and modificative of, experience; of which schematism the expression in words will be certain propositions, certain ground-judgments, which will respectively show as *axioms*, *anticipations*, *analogies*, and *postulates*. By the word subjacent, we would wish it to be understood that the forms so characterized are not to be conceived to precede, so much as to underlie, experience. Till experience there is no mental life whatever; and all *a priori* schematism must await the stimulus of experience before it can realize itself in actual operation. Nevertheless, though excited by experience, and wholly calculated for, and directed to, experience, it is quite independent of experience, and takes place in obedience only to its own conditions; but forming so an *a priori* ground-net, a fundamental dirradiation on which, and according to which, the world of experience deposits itself. We thus see that, from this provision of pure forms both of sense and understanding, there is subjacent to experience an entire *a priori* ground-system, the special peculiarities in the formation of which we have now more particularly to consider.

In the preceding Book (Simple Apprehension) we have seen the transcendental forms as well of sense, as of understanding: those forms without which no empirical contribution, no actual sensuous matter, could become for us a perception, or what we call an object of experience. There it has been proved

that without the unity of apperception, the synthesis of imagination, and the conjunctive function of the categories, this whole daily life that we name experience would be impossible for us. There also has it been proved that every single empirical particular, introduced by the channels of special sense, must take on the form, or rather adapt itself to the multiple, of pure perception in its two modi of space and time. We know now perfectly, then, the various parts of the *a priori* machinery, the various members of the transcendental apparatus, which is transcendental just for this, that it is at once *a priori* and *a posteriori*, *i.e.*, *a priori* in origin, but *a posteriori* in use, or as it presents itself in actual fact in the various things we perceive, in the various objects of experience. We have seen all this; but we have not exactly seen yet the precise operation of the machinery: we have not exactly seen yet how the various parts are fitted into each other, how the various movements are co-ordinated so as to complete the wholeness of the entire fabric and the unity of its function. This, now, is all that we have once for all to see—how the particulars combine and work together into the general. In order that what we name experience may be possible, such and such an apparatus must be presupposed; and we have now only to see how it actually works. We have experience; but experience involves such and such subjective conditions on our part, else it would be impossible. These, then, are to us the possibility of experience—the possibility of such an experience as this of ours. It becomes us, then, to classify these conditions, or to separate and arrange them towards an explanation of their particular action, and the manner of it. Briefly, we have found that the various parts of experience can be

grouped under two forms: sense and understanding; for the latter term includes apperception, imagination, etc. The characteristic of sense is plurality, multiplicity, variety, maniness,—a manifold, a complex, a detail of constituent terms, members, particulars, or parts. That, in a word, is the characteristic of affection as affection, as also of the general forms under which alone it can come into consciousness. The characteristic of understanding, again, is singleness, wholeness, simplicity, unity, oneness. These two agents, then, evidently mutually complement and complete each other. Understanding adds to the many of affection the unity of function; and without the latter the former would remain a disarticulate, unintelligible blur. Sense is merely receptive and, consequently, passive; the matter it yields would never present itself as knowledge, perception, were it not re-acted on by the spontaneity of the understanding. For it is not things in themselves that ever come before us, but only the states or affections of ourselves set up in us we know not how, by objects in themselves we know not what; and these affections, which we call empirical, as being produced *a posteriori*, to constitute the connected rational whole, named by us experience, must be combined within, and arranged according to the laws of the understanding within, — of that understanding, namely, into which they are received. What we have now specially to see, then, is how the multiple, the many, of sense is reduced into the simple or unity of the understanding.

In fact, there is at once considerable difficulty suggested by the question that presents itself here. How are objects, how is empirical matter, which is wholly an affair of sense, to be brought under the

understanding, which, contrariwise, is wholly intellectual? There must, surely, be something intermediate interposed, if there is unity to be established between two such discrepant extremes. But just such intermediate element do we possess in what we have discussed as pure perception, the forms, namely, of space and time. For these, if on the one side *a priori*, like the forms of the understanding (the categories), are, on the other side, sensuous, like the matter of special sense: *in* them and *with* them does all such matter present itself. They are at once not less intellectual and *a priori* on the one hand, than sensuous and, as it were, *a posteriori* or empirical on the other.

We can conceive, then, the possibility of the categories acting directly on the multiples of space and time, and, through these, on those of empirical sense. It is evident, too, that, of these forms, the inmost and most general is time; for into it all matters of sense, both outward and inward, must be received. If, then, the multiple or multiples of time be conceived as susceptible of the uniting and connecting influence of the categories, it is evident that there is a possibility established of conveying this influence to the whole infinitude of particulars that present themselves in actual empirical sense. We can thus conceive a system of schemata produced and brought about by the operation of the pure forms of the understanding on the pure forms of sense. This operation of the understanding might appropriately be named the schematism of the understanding; and to that schematism, to these schemata, it is evident that all other contributions of sense must submit and subject themselves.

The schema, we may remark by the way, is dif-

ferent from what we may name the type or image. The type has a certain definiteness and particularity about it, while a certain indefiniteness and generality attach to the schema. Five points, or five counters, or five pips, or five fingers, are severally a type or image of the number five; but any triangle in general you can construct or think, any horse or dog in general you can imagine, can by no possibility represent a type; it must remain a schema. The general notion triangle is simply a conceived formula whereby you can *construct* a type; but it is itself a schema, for it is of no single form,—rather it is of an infinitude of forms. To be an absolutely general notion, namely, the triangle must be neither scalene, nor isosceles, nor equilateral; neither right-angled, obtuse-angled, nor acute-angled: it must just be a triangle in general; that is, not a type, but a schema. So with the general notions, dog, horse, man, etc.: these are not types, but schemata. The type is a single image or figure set up by the empirical imagination; whereas the schema is an absolutely general formula for the production of a whole family of types: it is a monogram of pure imagination. Evidently, indeed, the entire operation alluded to here is one of the deeply-hidden arts or processes of the human soul.[1]

[1] Kant here is seen to make an easy end of our ordinary modern nominalistic quibbling. "An idea," says Berkeley (*Prins. Hum. Knowl. Introd.*, 12), "which, considered in itself, is particular, becomes general by being made to represent or stand for all other particular ideas of the same sort—a line which in itself is a particular line, is nevertheless with regard to its signification general—a line in general." Hume characterizes this proposition of Berkeley, that "all general ideas are nothing but particular ones annexed to a certain term," as "one of the greatest and most valuable discoveries ever of late made" (*T.*, i. i. vii.); and, in the *Enquiry*, section xii., he says further, "Let any man try to conceive a triangle in general, which is neither isosceles nor scalenum,

We can conceive, then, the possibility of the conjunction of pure understanding and pure sense producing schemata, and we can further conceive the conjunction of these schemata with empirical multiples (actual sensations) producing the arranged world of experience. Now it is judgment that in both cases will produce the conjunction: it is judgment that will subsume the particular empirical multiples under their respective schemata; and it is judgment that will subsume the pure multiples under the pure notions to the production of the schemata themselves. Now, the action of judgment in all this is simply formal; it adds nothing, it merely brings together and subsumes the relatively particular under the relatively general: it decerns the *casus legis datæ*. We cannot lay down a rule, then, with a view to guide judgment; for, under such rule itself, judgment could only again subsume,—standing in need, then, of yet another rule to guide it there! In point of fact, judgment is what we call *mother-wit*, and is incapable of being *learned*. No instruction can supply its want; and that is the *secunda Petri*, the *pars altera Petri*,—stupidity,—that which is the characteristic of the blockhead, dolt, dunce, etc. The statesman, the jurist, the physician, may be very learned men, and possess a thorough knowledge of every general rule; but, without judgment, they cannot discern the particular cases that apply to the general rules, and so

nor has any particular length nor proportion of sides, and he will soon perceive the absurdity of all the scholastic notions with regard to abstraction and general ideas." Dr Thomas Brown (Lect. 46) very clearly shows that Berkeley here only implicitly accepts what he explicitly rejects. As for Hume, again, when he defies a man to make a schema a type, he actually fancies that he is exploding all scholastic absurdities! Surely it is common sense to see that a general idea involves in imagination only a schema, and that a schema there is not a type, but a general receipt for a whole infinitude of types.

are unable to subsume. Judgment, however, if it cannot be learned, may be exercised or practised, and accordingly strengthened and improved. For a certain familiarity with examples is necessary to the very best judgment. At the same time it is to be acknowledged that, as no example can come up to the rule, a too great commerce with, and confidence in, examples, are apt to confuse and taint the precision and purity of the rule. And thus examples become, as it were, the go-cart of the understanding, and almost counterbalance by disadvantages the very advantages of them.

What we have here, then, in this transcendental logic where there is matter as well as form, is a doctrine of judgment, a doctrine of the faculty as it plies between the two, as it exercises its function of bringing the one under the other. But what that means is that certain pure multiples of time, being brought under correspondent categories, will give rise to an equal number of similarly correspondent schemata. Taking the categories in hand, then, we have simply to find out what multiples of time respectively correspond to them, and the relative schemata will at once show.

Now, the succession of time is at once a sensible multiple of what intellectual multiple is implied in the notion of quantity : it is the homogeneous coming together of like with like; but that is number. As for quality, again, no multiple in time itself can be found to correspond to it; nevertheless we are quite entitled to take the absolute universal of sensation as sensation, and conceive time filled by it. But so conceiving, it suggests itself at once that there is a process in this filling from any imaginable amount down to zero, or, equally, up from zero to any imaginable

amount. That now is degree, and degree will be the schema of quality. By degree we mean the coming together of filled moment with filled moment of time; as quantity, which is simply the homogeneous addition of pure to pure, is, so to speak, literally sensualized in the mere succession of time as a homogeneous addition of bare moment to bare moment. We may understand, therefore, that, in this latter case, any homogeneous empirical succession is not left in its mere indifferent separation, but, unit being connected with unit in the synthesis of imagination, collapses into the unity of apperception through the notion quantity. For it is evident that quantity is the notion under which any such multiple as that which is represented in the succession of time will fall to be subsumed; which notion, indeed, it is equally evident, is essential to produce unity in any such multiple, the mind otherwise being only passively filled with a perpetually fleeting sequence. Nor is it less manifest that, in quality, a corresponding function is required in order to induce unity on the amount exhibited in the filling of time.

Under these two headings (quantity and quality) we have only two schemata; there is only a schema for each *general* rubric, and we might expect one as well for each of the six subordinate categories. The reason is that quantity can have in kind only one multiple; it can differ only in amount (of extension); and that quality, similarly, can have also in kind only one multiple; it can differ only in amount (of intension), and that is in degree. But will this be the case as well with the categories that follow? What of the next category, for example, relation? Is there only one kind of pure relation, or are there several? If we glance at the particular categories, I think we

shall expect a different schema for each; and for this reason, that each represents a very different relation. But that necessitates for each different relation a correspondently different multiple. Now, will time be able to supply this? It was no act of usurpation to assume time as (in its succession) a type or exemplar of number and quantity; and it was certainly perfectly justifiable to regard time when put in relation with its absolute *generale* of filling: we cannot rightly think usurpation, or assumption, or presupposition, or begging the question, of that either. But, really, the multiple of time seems so uniform, simple, and monotonous, that one fears for the possibility of extracting from it more in that reference than we have already extracted – one fears, indeed, that it must be altogether impossible and out of the question to extract from it actually no less than three more modifications, and these very special ones too. Substance and accident, cause and effect, action and reaction: how find in a mere flux of homogeneous units three special multiples that shall be sensible types of the intellectual multiples implied in these very peculiar—and peculiarly different and distinct—intelligible relations? We can still, of course, allowably resort to space and the *generale* of the faculty of apprehension for a filling in time. As much as that is certainly to be regarded as *a priori* and pure, and quite legitimately at our disposal. If we can even wring out of time, and in these references, multiples to suit the three relations in view, it will not be competent to any man to except or reject. Let us, then, take said three relations in their order, and correspondently examine time, in connexion as well—if necessary—with its allowed lemmata or postulates.

First, then, can we find so any multiple that will

correspond to the relation of substance and accident? Why, yes. Time is a flux and yet it abides. It is as though time, to its own broken and fluent side, turned ever a whole, unbroken, and permanent side. Time is the vast unchanging ocean that gives foundation, place, and room to all its own bubbles. Time as a whole stands in the relation of substance to its own fluent parts, which are as accidents. All passes through *times* in time, but *time* passes not: *time* is as substance, then, and *times* as accidents. Nay, reality as reality, space itself, can be legitimately assumed as the *a priori* permanent substrate that, in time, corresponds to time itself. A void time were unperceivable. Time and times are discernible only on occasion of the experience of empirical matter. Time and times, then, *are* perceived, and they are perceived in this mutual relation. But they were so perceived only through mediation of empirical matter. Said matter itself, therefore, is in the same relation. Or there is a substrate permanent, fixed, invariable, constant, that corresponds to time; and there are modi, unfixed, variable, transitory, which correspond to times. We see, then, that filled time and filled times relatively constitute the sensuous multiple that will correspond to the intellectual multiple which is thought or implied in the notion substance. Empirical realities, to become realities for us, or to enter into and be united with our apperception, will assume this multiple in time, and collapse to unity under the notion.

Now, the principle that turned up under quantity we named an *axiom;* for it conditioned the very possibility of objects—no object could be an object for us that did not present itself formed on that principle. Again, the principle that turned up under

quality we named an *anticipation;* and this, too, involved conditions that necessarily entered into and manifested itself as constituent and constitutive of the object. These two principles, then, may be named mathematical; for they form a large portion of the very structure of every object. The principle involved under substance, however, is a relation, and asserts only that empirical realities will be *related* on *analogy* with the logical function of judgment implied in substance. This, then, is not a principle that appears as an ingredient entering into the object itself, but a principle that relates or connects object with object,—in other words, a principle that regulates, but does not constitute (or enter into) the phenomena—a principle, therefore, that is *regulative*, not *constitutive.* Again, and for the same reason, it is not mathematical but dynamical; it relates to the comportment of existence to existence mutually; it does not determine any existence as such. Relatively to any existence as such it is contingent; it prescribes nothing *a priori* which will be found necessarily in each and every existence. Relatively to existences mutually, however, it is necessary and prescribes their common reference. The difference of its evidence is thus plain: objects do not present themselves according to it as so and so mathematically formed or qualitatively constituted, but as thought in such and such mutual relation, necessarily, on analogy with a certain function of judgment. And yet it is not so much a relation connecting all realities the one with the other, as a condition of such relation. It is simply this, that, in all the vicissitude of accidents, substance abides.

In a word, for the *analogies* and the *postulates* we may preliminarily sum up thus: Time relatively

viewed, but still only in its own self or abstractly, presents three multiples, which, otherwise also, may be regarded as its three inherent relations; and these are respectively *duration*, *change*, and *interchange*. Again, time relatively viewed, but concretely or with reference to its filling, similarly exhibits another triplet of relations. Said filling, namely, may be *possible*, or it may be *actual*, or even *necessary*. Time, in relation to its own succession, is very conspicuously, as already said, simply a type of duration, substance; while the succession, in contrast with it, is, as conspicuously, but a type of its accidents. Time, as it fleets from past to present (in which fleeting the present is ever the result of the past, and only reachable through the past), is but type of a reality which being given involves a consequent; and that is but a schema of causality. Or time, as it fleets, is a type of change; and change, being the same thing existent and persistent under two opposed determinations, implies an antecedent. Time in itself presents no relation of interchange; but by means of space and the filling of space, we can see that things may be together. The multiple contemporaneous times, then, is but a type of communion, and communion is the schema of the abstract notion *reciprocity*. Time, or a time, complete in its conditions, but indefinite, is a type of the agreement of a notional synthesis with the general conditions of time; and this is a schema of *possibility*. Time, or a time, complete in its conditions, and definite, is a type of existence, and a schema to the notion *actuality*. Definite existence in all time is a schema of *necessity*.

[Here follows a long discussion in very full detail. As intimated, I only select from it sentences that seem happily to explain or defend.]

A time is unity of a homogeneous successive multitude; therefore *a* time is an extensive magnitude; and in like manner space is an extensive magnitude. But again every object or phenomenon is, though with empirical filling, just *a* time or *a* space; therefore every object or phenomenon is an extensive magnitude. All empirical multiples, in fact, correspond unit by unit with the pure multiples of space and time which contain them; and as these latter are apprehended by the synthesis of imagination, and conjoined into unity by the category, so must those former. Thus, then, is it that the function of the category is conveyed to empirical matter; and thus, too, is it that such matter contains in it, even as it presents itself to our sensuous consciousness, elements of necessity; for all such matter, once objectively placed before consciousness, is a compound of elements as well *a priori* as *a posteriori*. Or, again, thus is it that all empirical objects contain *a priori* elements and, through them, an authority apodictic and absolutely universal. It is not things in themselves we know, but phenomena, into which enter the *a priori* forms as well of sense as of understanding, and what holds of these latter, holds also of the former. Thus it is that we can *a priori* prescribe laws and conditions to objects which, as *a posteriori* themselves, have still to be waited for.

The necessity of imagination towards the possibility of what synthetic processes are involved is obvious; for through that faculty only can the past items be reproduced for summation with the present: without such reproduction we could have no consciousness but of insulated and disconnected units. Imagination, in short, is *par excellence* the place of ideas; it is the element in which they live; in which

they are received, conserved, and reproduced. But every unit of consciousness, sensuous or intellectual, is an idea. It is in imagination, therefore, that every process whatever of intellection must take place; or imagination is the universal intellectual menstruum, the universal vehicle of mediation between sense on the one hand and the functions of apperception on the other. Through imagination, acting by means of the pure form of time on the pure form of space—through imagination it is that we have the science of geometry, etc., etc.

[Further references to quantity, quality, and substance omitted.]

Here, then, we demand, first, what notional multiple is implied in the function itself (of judgment) which is to be the original of the category of cause and effect? This multiple is evidently a relation between two members such that the one of them, the antecedent, determines the other, the consequent. That is, there is a process implied, with a necessary first and a necessary second. Can time, now, present a sensuous multiple that will correspond to this notional multiple? Well, the function involves a process; but what is the process of time? It is simply change. The present *is*, and we feel it; the past *was*, and we feel it no longer: this is change. To be aware of this process of time, we must have been aware of empirical realities in a like process. Therefore there *are* such, and they assume this process in time; for, though we know time on occasion of them, time does not depend on them, but they, on the contrary, depend on it. Still time is not an absolute object in which empirical realities present themselves: were it an absolute object, its contained objects would have each its necessary relative place. It is not,

then, by the mere perception of time that we perceive the succession of objects. Time is quite apart from these, and they themselves are only related to time by us after we have apprehended them, and according as we have apprehended them. For sense, as it is affected from without, is merely receptive and passive, and all further reference, relation, combination, is product of the various principles of our spontaneous understanding. These affections, in fact, constitute but a succession of subjective states, and all that is empirical would appear mere sensuous subjective modification, did not the understanding synthetically interfere. It is this synthetic function of the understanding that externalizes mere internal affections,—that throws out our mere inner subjective modification into a very world of outer objective realities.

Still, should the question be put to us, we may proceed to admit that, though the *synthesis pura* constituted by the *a priori* or transcendental machinery, potentially precedes analysis, an act of analysis must, nevertheless, always be involved in the bringing into operation of the various steps which, materials of sensation being given from without, produce *realization* of this *synthesis pura* into the world of experience. For the *synthesis pura* is realized only on occasion of experience, and the very first act of experience involves analysis. To prove this we have only to consider that the *synthesis pura* consists of various parts. It consists of several ground-multiples of time united, through imagination, by function of several ground-unities or notions (categories), into the one of apperception (self-consciousness). The sensuous affections, again (set up in us we know not how, by things in themselves we know not what), will not possibly enter indiscriminately, so to speak, into this system of

multiples and unities. They must recognizably possess correspondences respectively adapted to these multiples and unities, and be accordingly distributed and assigned. The *a posteriori* matter must be as variously modified as the *a priori* form. Certain affections will be subsumed under this function and its correspondent pure multiple, certain others under that, and so on, till every function is supplied, not only with its own pure multiple (of time), but also with its own empirical multiple (of sensuous affection). That is, judgment will discriminate, in every separate instance, the empirical cases of the pure rule. Discrimination, however, can only take place through analysis. The synthesis and the analysis are simultaneous, then; or, indeed, to the production of any empirical object, the analysis, so far as action is concerned, precedes the synthesis (*empirica*); for the empirical matter cannot enter the non-empirical system of moulds till judgment, acknowledging the right, permits the transit. That indeed seems plain: that, if there is a pure diversity, a correspondent empirical diversity must be admitted and assumed; for, if not, how could we, without direction or guide, hope correctly to accomplish all these infinite actual subsumptions?

Empirical matter has thus a necessity of its own. We cannot set up our own sensuous affections; as such, they are independent of us, and as such we cannot alter or reject them. We are subject to their necessity; we entirely depend on them. But this necessity is for us contingent, in the sense that we do not see into it, that we do not see its rationale and grounds. It comes, and we submit to it, and our submission is absolutely necessary. Still it itself is contingent in this way, that we cannot say, it could

not have been otherwise. The sense-affections I have are entirely contingent. I might have had in their place any others. I only feel that they are as they are, but no more. This—that they are as they are—is, as such, however, entirely independent of me. I have therefore to obey the empirical matter, and group according to its peculiarities. There must be a hint in the empirical succession itself, which determines when quantity, when quality, causality, reciprocity, etc., shall be the proper category to act, and subsume into experience. The empirical succession that is to be grouped under causality, for instance, cannot be the same as that which is to be grouped under reciprocity; the succession, namely, that calls for a reversible number must surely be correspondently different from a succession that calls quite as imperatively for an irreversible number. The empirical variety itself must be furnished with a cue, must, as it were, blow its own prompter's whistle, before my judgment can be expected duly to subsume it into the appointed checker.

Even when subsumed it will continue to manifest its own individual necessity. The amount of time or space assumed by any empirical object depends on it, the object itself, though its general subjection to time and space depends on me. The particular quality or degree, too, of any object depends on it, though the general law depends on me. It is not really an objection, then, the fact that particular shape and particular form are entirely independent of the general, so far as each is particular, though, again, each must assume the laws of the general. The general laws of space are verily in every particular object through me, although the particular form and quantity of this object in space depend entirely on its

own transcendental matter. So it is with causality. I can subsume under that notion a sensational or empirical reality only when that reality exhibits its pass, – when it manifests such particular nature as renders it amenable to such particular rule. There is thus, then, a certain pre-established harmony between pure form and empirical matter: the one could never be subsumed under the other, were they wholly disparate, wholly incommensurable. This pre-established harmony, however, between the empirical and the intellectual does not render the intellectual superfluous. The intellectual is absolutely necessary in order to raise what is subjective and contingent into what is objective and necessary.

In the case of certain categories, however, the fact of even the empirical succession being necessarily credited with the possession of necessity is not to be slurred over, but fairly faced. And here we mean succession as such, succession that remains succession. In quantity and quality, the succession in consciousness of the constituent units of the particular detail, complex, or manifold disappears: these units become united into a single object. But in causality and reciprocity it is not with successions of units collapsing into single objects that we are concerned, but with successions among objects themselves, successions as successions, successions that are not only at first but even at last successions. Then these successions are different the one from the other,—so different that each must bring with it nothing less than an empirical necessity, an empirical necessity of its own and peculiar to itself. Causality, as we have seen, is distinguished from reciprocity just by this, that its succession cannot be reversed, while that of reciprocity not only can be reversed, but must. From this it follows that there

is a certain order in the phenomena themselves, adapting them now to causality and again to reciprocity.

That is the difficulty, then. As the order is precisely what constitutes the distinguishing peculiarity of the two cases, why call upon an intellectual order from within for the attribution of necessity, while such necessity is already a manifest possession of the phenomenal order from without? Even phenomenally what we term cause must precede what, in the same connexion, we term again effect. Even phenomenally we cannot transpose the order. And is it not just this incapability of transposition that decides us to call in this category (causality), and not that one (reciprocity)? Where is the reason for a double necessity, then? The phenomenal necessity being admitted, what occasion is there for the apparent superfluity of an intellectual necessity? The intellectual necessity does not even explain the phenomenal necessity; for the latter must be admitted to be independent of, and to precede, the former. Does not the old difficulty of causality remain, then, and is not the very thing we want explained just this phenomenal necessity? Before your intellectual category can act, and superinduce its peculiar *vis necessitatis*, you admit that there must be a fixed phenomenal order. What Hume wants explained, then,—what we all want explained,—is just why is this phenomenal order fixed? Why is the order always A B, and not sometimes B A? Or how do we know that it is really so,—how do we know that the order is always A B, and never A C or A D, etc.? Hume, in examining the whole process itself and every member of it, both before the event and after it, was quite unable to detect the copula that was the *vis nexus*, the actual necessity in question. He was

driven, therefore, to look upon the whole business as dependent, naturally, on instinct, or, philosophically, on custom. We simply expected to find conjoined what we had been in the habit of seeing conjoined. And, really, if there can be no objective reason discovered, it is good ratiocination to have recourse to a subjective reason. Nor is the subjective reason in question a weak one; rather it is one that obtains widely, and even deeply, in human affairs. Nevertheless, it is quite true, as has been pointed out, that no customary association is adequate to a connexion that is, conspicuously, apodictically necessary and universal; and Hume's explanation is to be definitively rejected. What we have here before us, however, is this, that our own explanation is incompetent,—that we ourselves seem to fail, indeed, in the very key-stone of our whole system. The presence of apodictic synthesis in contingent matter,—the presence of apodictic synthesis at all,—that we have undertaken to explain,—precisely, too, in connexion with Hume's problem,—and precisely that do we seem to fail to explain. Our answer, after all,—and especially as regards causality,—seems to turn only on a superfluous and supererogatory pre-established harmony between the facts of sense and the functions of the intellect. The phenomenal necessity being simply assumed, and not explained, an awkward intellectual necessity is then merely mechanically added to it.

Nevertheless, we have already said what is necessary here. Sensuously we know only the units of a phenomenal succession. That this succession does not remain such, but gets combined into the various objects and connexions of experience, cannot depend upon the receptivity of sense, but must depend upon the spontaneity of the intellect. Let the particulars

be what they may, the general law and laws which they are found to obey can only issue from within. These laws are still absolutely necessary in order to convert disarticulate units of subjective affection into —just to say it at once—the formed universe. The phenomenal order is really granted to be fixed. Nevertheless, this, in the first instance, is but a matter of subjective judgment, and the necessity it involves is, equally, not more than subjective. Still this is not, exceptionally, so with causality merely. All empirical elements bring with them, in fact, a certain empirical necessity. Leaves are green, rocks are solid, seas are liquid: I must so accept them, I cannot alter them. This is their qualitative necessity, and it is wholly independent of me. In the same way, among these things, and all things, there obtains an empirical *order*, which is empirically necessary, and which I have simply to accept, without power to move a finger in change of it. There are phenomena in which I cannot return from the second to the first; and there are equally others in which it is their express distinction that I can take the units of the relative manifolds in any order I please. The former, presenting an analogy to, are subsumed under, the logical process involved in the relation between antecedent and consequent, which process synthetically applied to phenomena, is named causality. The latter, presenting an analogy to the logical function that is concerned in a disjunctive proposition, are subsumed under reciprocity. And observe the effects of the subsumption. So long as we have merely the facts of sense before us, we have an unconnected succession; my imagination, which receives them, finds the one first and the other second, and it is a subjective fact that I always find them so. But this necessity is like

that of the greenness of the leaves, etc.; what the things are in themselves that lie under the special quantities, or under the special qualities, or under the special arrangements,—what are the noumena that lie under the phenomena,—I know not all. These things in themselves, these noumena, must dictate: they must prescribe their own quantities, qualities, and arrangements; but still these quantities, qualities, and arrangements are, as they are in the first instance, or only in sense, simply subjective, merely contingent. As they are I find them, and as they are I accept them; but still I am quite blind in their regard. What that is that lies under the double we call cause and effect, I know not at all; and I see no rationale whatever in the duplicity presented until I myself regard it in the light of a logical relation of my own, that of antecedent and consequent. In short, phenomena, while only in sense, must be but subjective and contingent units: they can become objective and necessary only when lifted into the functions of intellect, which functions are alone there beside them, are alone left as any possible agencies to manipulate them further.

Thus, then, there are two judgments involved in every act of the *perception* of *experience*. There is, first, a subjective judgment that attaches itself only to the phenomena themselves (and, consequently, to the order of them); and there is, second, an objective judgment that, through due distribution and assignment of the categories, projects these phenomena—our own contingent subjective affections—into the articulate world, into the ruled and regulated context of experience. All phenomena are received first into time, and the functions of unity implied in the categories have already potentially converted the

various multiples of time into schemata—checkers, as it were, for the final completion into experience of our mere subjective sensations. As regards causality, for example, the unity of apperception (self-consciousness) possesses a logical function which we name antecedent and consequent (or the hypothetical judgment); time, again, which is only a form within us of general sense, as it were, of *a priori* sense, even of pure or non-empirical sense, transcendental sense (*a priori* in place, but empirical in use)—time, again, possesses, on its side, a multiple or series,—namely, in its potential or dynamical process,—which may be assumed as the type of change; said pure function of unity and said pure sense-multiple (affection) coalesce into a schema; this schema receives into itself such multiples of special sense as present an analogous order; and thus it is that certain mere subjective phenomena are perceived as objects bearing to each other the mutual relation of cause and effect.[1]

We have probably seen enough of reciprocity in the preceding, and may now pass it.

Of *modality*, the categories *possibility*, *actuality*, and *necessity* are, also, from what has been already said, probably, intelligible enough. They are, so to speak, but the other three categorical classes *in act*. Fulfilment of *quantity* is to satisfy the requisitions of *form*, the requisitions of the *understanding*, and that is what characterizes *possibility*. Fulfilment of *quality*, again,

[1] An apology is here due for the length of the discussion, which, however, is much more detailed in the manuscript. As may be known from other works, too, I do not admit at last the validity of the relative defence. It itself, however (the defence), will be allowed, perhaps, to be not alien to the spirit of Kant. At all events, it will show that the student at work must have made a very serious business of the various pieces of Kant's machinery, and must have remained very long, faithfully, and even trustingly by them.

is to satisfy the requisitions of *matter*, the requisitions of *judgment*, and that is what characterizes *actuality*. Fulfilment of *relation*, lastly, is to satisfy the requisitions of *connexion*, the requisitions of *reason*, and that is what characterizes *necessity*.

It is not now necessary to repeat either that all these forms are only for the filling of sense, only for experience, and that they are quite idle and useless else. Nay, they are even mischievous should any attempt be made to deduce results from them independently regarded, or *a priori* and alone. They themselves are *a priori;* but, even so, they are only the *possibility* of experience, or, for that matter also, only the possibility of *experience;* and they are nothing more. We know, too, only the one experience, only the experience we have; to conceive another, any other,—and it is quite possible to conceive any number of different experiences,—is not to realize it. We are bound, not only to forms of sense on the one hand, but to forms of understanding on the other: we may, indeed, conjecture others; but conjecture is not discovery. With the same sense-forms, we might possess different categories; or, the latter remaining, the former might be changed; or we may conceive both changed; or we may even conceive an intellect that would not think discursively through categories or notions, and not perceive vicariously through forms of sense, but that, like the divine mind, it may be, would directly perceive, or see into.

Thus, then, we have completed all that relates to transcendental *judgment*. Under transcendental *apprehension* (understanding) we were enabled to perceive the nature and necessity of certain *a priori* subjective forms, both of sense and intellect, without which this regulated whole which we call experience would be

manifestly impossible; and now, in the present book, we have seen the manner in which these *a priori* elements mutually relate themselves into an *a priori* system antecedent to, and in provisional condition of, experience, as well as that also in which the elements proper of experience—those, namely, which result from special sensation and are termed *a posteriori*—become arranged and subsumed under said *a priori* system. In correspondence with all the ground-notions of the understanding, time was found to furnish ground-multiples of sense: the subsumption of the latter under the former gave rise to schemata; and these again readily discovered to us the principles which judgment would adopt in subsuming under them the whole wealth of the empirical all. The nature and evidence of these principles presented such points of relative difference that they were of necessity named differently. The *a priori* principles that concerned extensive magnitudes were, consistently and appropriately, termed *axioms.* Those that related to degree were similarly denominated *anticipations.* And while, with reference to the intellectual relations, the laws of sensuous relations appeared as *analogies*, those of modality could only lay claim to the name of *postulates.*

All of these principles, both sensuous and intellectual, were found to have no intention, no validity, no meaning, no reference, unless to the *a posteriori* empirical matter, from which alone they could receive filling and objective actuality. The world that resulted was seen, however, to be, in every respect, phenomenal; and this, not only because the empirical filling was required to adapt itself to certain internal forms, but because, also, this very empirical filling itself was only, and could only be,

sensuous affection. This phenomenal life we found to be as true for the inward as for the outward world, and that we knew the noumenon subjacent to our phenomenal consciousness just as little as we knew the noumena subjacent to the phenomena we call things without. It by no means follows, however, that this word noumenon is entirely empty and meaningless for us. We cannot assert, indeed, that we affirmatively know any noumenon. Such knowledge is utterly impossible to beings constituted as we are, whether sensuously or intellectually. Or limitation and finitude in both respects have been clearly and convincingly demonstrated; and a knowledge of noumena is only possible for an intellect which we may name original and primary, while ours, plainly, is but derivative and secondary. Such original and primary intellect we may conceive to belong only to the Deity; who will not think through finite categories, nor perceive through finite senses, but will intuitively and directly know all things, not as they appear, but as in themselves they are.

But if we are so situated as regards affirmative noumena, the case is different with those which we may call negative. These we may assume. Nay, a phenomenal world implies a noumenal; and the assumption of such is absolutely necessary in order duly to subordinate and limit the pretensions of sense. It does not follow, nevertheless, that its phenomenal nature attaches any character of uselessness and meaninglessness to this the world of time which we, in time, inhabit. Here, as evidence from every side assures us, existence is but probationary. There, beyond, is our true and noumenal home awaiting us for eternity, with God, when time and the shows of time shall have worked out their function on us.

That these are true views, and that our system is co-extensive with the universe of things, will appear more and more evident as we proceed. The world we have yet seen is a world conditioned merely. Under *reason* (our third book), we shall discover those relations to the necessary unconditioned, that round and complete it (our world) as an object of intellect. Our *practical critique*, again, will introduce us to the veritable noumenal world; while our inquiry into *judgment* will mediate and justify transition from the one world to the other. In this way, the whole of those first principles on which man, intellectually, morally, and æsthetically, founds, will be given to sight; and the course and method of their application to our whole actual existence will, without difficulty, suggest themselves.

Before proceeding to our third book (on *reason*), however, we interpose certain intercalary, introductory, and transitionary matter relative to noumena and phenomena, as well as to what we have named the notions of *reflection*. These last will be found of considerable interest in themselves, and very strikingly illustrative of the value of our principles as applied judicially to certain views of Leibnitz.

TRANSLATION.

THE KRITIK OF PURE REASON.

(TRANSLATION.)

Introduction.

I.

Of the Difference between Pure and Empirical Cognition.

It is beyond a doubt that all our knowledge begins with experience. For by what should our faculties be roused to act, if not by objects that affect our senses, and thus partly of themselves produce impressions, partly, again, bring the understanding itself into movement, in order to compare these, to join or disjoin them, and in this manner work up such crude material of the intimations of sense into a cognition or recognition of objects which is named experience. So far as time is concerned, then, no cognition of ours precedes experience, and with experience all our knowledge begins.

But, though all our knowledge begins *with* experience, it does not follow that therefore it all derives *from* experience. For it is just possible that experience is itself a compound. It is just possible, that is, that there is in experience, besides what is due to the impression of sense, something in addition that comes from our faculties themselves (when merely acting because of impression); and in that case, it would take long practice, it may be, to enable us to distinguish the latter, and separate it from the former.

It is at least not a question to be summarily dismissed, but one that demands more particular consideration, this, to wit: whether there really be such component part of knowledge as is independent of experience and, indeed, of any impression of sense whatever? Such component part of knowledge, did it exist, were alone to be truly termed *a priori;* and it would evidently stand in contradistinction to what other component part of knowledge is called empirical: the latter, namely, having its source only *a posteriori*, or in experience.

The expression *a priori*, at the same time, is not precise enough to designate the entire sense of the preceding question. For of many a mere empirical fact, we say, that we know it *a priori*, simply because we do not directly derive it from experience, but from a general rule; and this, even notwithstanding that the rule itself may be so derived. For example, we say of a man that shall have undermined his house, he might have known *a priori* that it would fall in; he had no occasion to wait for the experience of the actual event. Nevertheless, he could not have known this absolutely *a priori*. For that bodies are heavy and, consequently, fall when their supports are withdrawn —this, at least, he must have known by experience beforehand.

In what follows, therefore, we shall understand by cognitions *a priori*, not such as are independent of this or that experience, but such as are totally independent of any experience whatsoever. Opposed to these are empirical cognitions, or such as are only possible *a posteriori*, or from experience. Pure, again, are those *a priori* cognitions which are quite free from all and every empirical admixture. Thus, for example, the proposition, that all change has its cause, is an *a priori* proposi-

tion; but it is not, at the same time, *purely* such, for change is an idea which can only be derived from experience.

II.

We do possess certain *a priori* Cognitions, and even Common Sense is never without such.[1]

What is wanted here is a criterion, by means of which we may, with certainty, distinguish what is pure from what is empirical. Now experience informs us that something *is* so and so, but not that it cannot be otherwise. *Firstly*, then, should there be a proposition such that it is thought together with its necessity, then it is a judgment *a priori;* and, if underived from any other, absolutely *a priori*. *Secondly*, experience extends to its judgments never strict or true, but only (through induction) assumptive or comparative universality; so that, properly, it can only be said, So far as we are yet aware, there is no exception to this or that rule. Should any judgment, then, be thought in strict universality, or so, that is, that exceptions are impossible, we may be sure that that judgment is no derivative from experience, but directly *a priori*. Empirical universality, therefore, is only an arbitrary raising of validity from that which obtains in most cases to that which holds good in all, as in the proposition, for example, that all bodies are heavy. Whereas, when strict universality attaches to a judgment, such universality points to a special cognitive source, namely, to a faculty of cognition *a priori*. Necessity and strict universality, therefore, are sure criteria of *a priori* cognition, and

[1] Rosenkranz has here "der gemeine Stand." I prefer to read "der gemeine Verstand," as, indeed, is supported by the text: examples of ordinary common sense follow examples of science.

inseparably found together. In practice, however, as it is easier, now to apply the one and now the other, it will be advisable to avail ourselves, as occasion may suggest, of either criterion separately; for, even separately, either of them is quite infallible.

Now, it is easy to show that there actually are in our knowledge such necessary and, in the strictest sense, universal (consequently pure *a priori*) judgments. Would we have an example from science, we have only to turn to any proposition in mathematics; while, as for the most ordinary common sense, there is obviously to hand, by way of instance, the proposition that every change must have a cause, where the very notion cause so manifestly implies necessity (of connexion with an effect) and strict universality (of rule), that it would be altogether lost did we derive it, like Hume, from our conjoining what simply follows with what simply precedes, through the mere habit of the experience, and the consequent simple custom of connecting ideas (where the necessity could be only subjective). Besides demonstrating the actual existence in our knowledge of principles *a priori* by a reference to fact, we might even *a priori* prove as much. We might demonstrate, that is, the indispensable necessity of such principles to the very possibility of experience. For how should there be any certainty in experience, were all the rules in it only empirical and (consequently) contingent? It were hardly possible, evidently, to allow any such rules the name of first principles. But it may suffice here to have demonstrated the fact of the possession of pure cognition on our part, together with the signs of the latter. Nay, not merely judgments, but even certain ideas, may claim for themselves an *a priori* origin. Suppose, in the case of our empirical idea of

a *body*, we successively withdraw all its empirical constituents, such as colour, consistency, weight, even impenetrability, we shall still find it impossible to withdraw the space it occupied. This space will still remain when the body itself has disappeared. In like manner, if, in regard to our empirical idea of an object in general, whether corporeal or incorporeal, we withdraw all properties known to us from experience, we shall still be unable to withdraw from it those by which we think it as substance, or as attributive to substance (though this notion of substance has more determination in it than that of an object in general). We must, therefore, overborne by the necessity with which said notion forces itself upon us, admit that it has its seat *a priori* in our faculties of cognition.

III.

Philosophy stands in need of a Science which shall determine the Possibility, the Principles, and the Limits of all *a priori* Cognition.

But, to go still further, it is a fact that there are cognitions which even quit the bounds of all possible experience, and actually, by means of ideas for which, so far as experience goes, no correspondent object can be found, assume to extend the range of our judgments beyond any experience whatever.

And just in these latter cognitions, transcending as they do the world of sense, and unaccompanied by experience to guide and correct them, there lie interests of reason which we hold to be of far greater consequence and loftier aim than anything or all that understanding can teach us in the domain of experience. In these cognitions, indeed, even at the risk of failure, we rather venture everything than, for any reason of

doubt, or carelessness and indifference, consent to forego what is of such an import. Such unavoidable problems of pure reason's own are God, Free Will, and Immortality. The science, again, which, as well in the end it contemplates, as in all its complement of means, is alone directed to the solution of these, we name metaphysic —a science that, in its procedure, starts as yet only dogmatically; that is, having instituted no previous inquiry into sufficiency or insufficiency on the part of reason for so great an enterprise, it yet confidently undertakes completion of it.[1]

Now, it seems no more than natural that, once we have left the solid ground of experience, we should not forthwith proceed to build, without having carefully assured ourselves, first of all, in regard to a foundation, and that, too, all the more, should we find ourselves provided only with principles which are unauthenticated, and have come to us we know not whence. It seems no more than natural, I say, that, rather than this, we should have long before started the question, How have we got to these principles, and of what extent, import, and value are they? In effect, nothing is more natural when by the word *natural* we understand what, rightly and reasonably, ought to take place; but, on the other hand, when we mean by *natural* only what usually takes place, then nothing is more natural than that any such preliminary inquiry should remain long null. For the fact is, that some of the principles in view (as the mathematical ones) possess authentication from of old, and reflect, consequently, a similar presumption on to others which may in reality be altogether different. Besides, when one is beyond experience, one is safe not to be contradicted by ex-

[1] Rosenkranz would seem to omit a sentence or two here.

perience; and, eager as we are to extend our knowledge, only when so contradicted is it that we can allow ourselves a halt. But even this may be avoided, should we be but careful with our fictions; for fictions, in such circumstances, they must be. On the other hand, mathematics afford us a splendid example of success in the cognition in question. Objects and ideas, it is true, are considered there only so far as they are capable of being exhibited in objective representation. But this is easily overlooked, because said representation can itself be *a priori* given, and is, consequently, scarcely to be distinguished from a pure notion proper. Led away by such a proof of the power of reason, we can see no bounds to the extension we desire. The light dove, in feeling the resistance of the air its free flight cleaves, might very well think to itself that it would have a still better chance in a space that were void. Even so Plato, because of the narrow limits it set the understanding, forsook the world of sense; and, beyond its bounds, buoyed up on the wings of the ideas, committed himself to the blank inane of the pure intellect. He did not perceive that, with every effort, his progress was null; for foothold he had none, against which steadied, he might have exerted his strength to bring reason from the spot. It is, however, an ordinary fate of speculative reason, to complete its edifice at the soonest, and only then to examine whether the foundations are well laid or not. All manner of excuses, rather, is indulged in to comfort us in regard of their entire sufficiency, or even to prove such late, dangerous examination wholly inexpedient. What saves us during the work from any fear or suspicion, deceiving us with apparent substantiality indeed, is this. A great part, perhaps the greatest, of the business of

our reason consists in the analysis of ideas which we have already formed of objects. This furnishes us with a number of cognitions which, although they are nothing more than elucidations or explanations of what is already (confusedly) implied, are still, at least in form, regarded as new: in matter or contents, not extending our notions, they explicate them. But this process furnishing, as it does, an actual *a priori* cognition, accompanied, too, by a certain safe gain, our reason interpolates unawares into this false show of extension allegations of quite another nature; foisting in with given notions other notions quite alien, and that, too, *a priori*, without our knowing how or whence these latter come, or even without any such question being ever once entertained by us. Accordingly, I shall treat directly now in the beginning of the difference between these two modes of cognition.[1]

IV.

Of the Difference between Analytic and Synthetic Judgments.

In all judgments in which the relation of a subject to a predicate is thought (affirmatives alone considered—application to negatives being afterwards easy) this relation is possible in two ways. Either the predicate B belongs to the subject A as something that (covertly) is contained in it; or B lies completely outside of the notion A, though possessing connexion with it. In the first case I call the judgment *analytic;* in the second *synthetic.* Analytic judgments (the affirmative ones) are therefore those in which the connexion of the predicate with the subject is

[1] One or two trifling expressions in the above are not found alike in the different editions.

thought through identity; synthetic, again, those in which this connexion is thought without identity. We might name them also, the former, judgments of explication; the latter, judgments of extension. The former, namely, add, in the predicate, nothing to the notion of the subject, but only separate this notion into its subnotional parts, which parts are already (obscurely) thought *in* the notion. The latter, on the other hand, add to the subject a predicate which was not at all thought in it, and could not by any analysis have been extracted from it. For example, if I say, All bodies are extended, this is an analytic judgment. For, in order that I may find extension as connected with it, I need not leave what notion itself I attach to *body*. I have only to analyze it, or open my eyes to what complex I think in it, to become aware of this predicate as contained in it. The judgment, therefore, is analytic. On the other hand, if I say, All bodies are heavy, in that case the predicate is something quite different from anything I think in the mere notion of a body as such. The addition of such a predicate produces, therefore, a synthetic judgment.

Judgments of experience, as such, are all synthetic. For it were absurd to have recourse to experience for an analytic judgment, seeing that I need not go out of my notion itself to get the judgment, nor require, therefore, any testimony of experience in the case. That a body is extended is a proposition *a priori* evident, and not a judgment of experience. For, without having recourse to experience, I have already in the notion all the conditions necessary for my judgment. I have only, according to the principle of contradiction, to extract the predicate from the notion. In so acting, I become aware, also, of the necessity of the judgment, and necessity is no declaration

of experience. On the other hand, although I do not include, in the notion of a body in general, the predicate heavy, still said notion (body) designates an object of experience, by a part of experience, to which part I can add other parts of the same experience, not comprehended in the first. I know the notion body already analytically, say, through the characters extension, impenetrability, figure, etc., which the notion simply implies. But now I extend my knowledge, and in once more consulting experience (from which I had derived this notion of body), I find, always conjoined with the said characters, that also of weight, which, as a predicate, therefore, I add synthetically to the notion in question. It is, therefore, on experience that the possibility is founded of the synthesis of the predicate heavy with the subject body, because, though the one is not implied in the other, still both notions, as parts of a whole (namely experience, which is itself a synthetic conjunction of perceptions), belong to each other, if only contingently.

But, in the case of *a priori* synthetic judgments, this expedient (of experience) is altogether inapplicable. If, in such reference, I am to go beyond the notion A in order to recognise another, B, as connected with it, on what do I support myself, and by what is the synthesis made possible, seeing that I have not the advantage in this case of looking about me for it in the field of experience? Let us take the proposition, All that happens has a cause. In the notion of something that happens (an effect), I think something come to be, which, therefore, had a certain time before it, etc., and from this something, as it is there before me, it is possible for me to deduce various analytic judgments. But the notion cause lies quite

out of this notion. Denoting something quite different from that which happens (the effect), it is not at all implied in it. How do I come, then, to say of any fact in event something quite different from the fact itself, and to recognise the notion cause, though not contained in said fact, nevertheless as belonging to it, and that, too, necessarily? What is the unknown *x* on which the understanding supports itself, when it believes itself to discover from the notion A a predicate B, alien to it, but which it judges, nevertheless, to be connected with it? It cannot be experience, because the relative proposition adds the latter to the former, not only with a greater universality than experience can supply, but even with the expression of necessity, and consequently wholly *a priori* or through mere notions. Well now, the entire end and aim of our speculative cognition *a priori* concern such synthetic principles, or judgments of extension. For the analytic ones are certainly of the greatest importance and necessity, but, here with us, they are available only for the sake of that precision of ideas which is required for an accurate and complete synthesis, as an acquisition veritably new.[1]

V.

In all the Rational Theoretic Sciences, Synthetic *a priori* Judgments are present as Principles.

1. Mathematical judgments are all synthetic. This proposition seems hitherto to have escaped the observation of the anatomists of human reason—nay, to be directly opposed to all their suppositions, although it is undeniably certain, and very important in result.

[1] Rosenkranz has some slight differences here too, besides some errors of press.

For, because it was found that mathematical reasonings proceed all of them on the principle of contradiction (as the nature, indeed, of apodictic certainty requires), there ensued the conviction that by means of the same principle also it was that the fundamental propositions themselves were to be seen into. In this they erred. For a synthetic proposition may certainly be understood from the principle of contradiction; still, only in this way, that another synthetic proposition is presupposed from which it may be inferred,—but never independently.

First of all, it is to be remarked that mathematical judgments as such are always *a priori*, and not empirical; for they bring with them necessity, which is not to be got from experience. Should this, however, as a general proposition, appear doubtful, I will confine it to *pure* mathematic, the very notion of which implies that it is not concerned with empirical, but only with pure *a priori* cognition.

We might be apt to think at first that the proposition $7 + 5 = 12$ is merely an analytic proposition, which follows from the notion of a sum of 7 and 5, according to the principle of contradiction. But if we look closer, we shall find that the notion of the sum of 7 and 5 implies nothing but the uniting of the two numbers into one, there being no thought, at the same time, of what this one number itself is which comprehends the two. The notion of 12 is not thought in this, that I think to myself the uniting of 7 and 5; and I may analyze my notion of such possible sum as long as I please without finding the 12 in it. We must go out of these notions, and take help from perception. We must assist ourselves, that is, by such objective representation as corresponds to one of the two numbers (say five points or

the five fingers), and, so assisted, add the units of the number perceived (5), one by one, to the notion of the number thought (7). I take first the number 7; next, for the notion of the 5, I refer to my fingers as perceived; and then I add the units (which together constitute the number 5), one by one, in guidance of the representation perceived, to the number 7. In this way, for result, I see the number 12 emerge. That 7 should be added to 5, I have indeed thought in the notion of a sum 7 + 5, but not that this sum is equal to the number 12. An arithmetical proposition is, therefore, always synthetic, as we may more distinctly discern, should we assume somewhat larger numbers; in which case it will clearly appear that, let us turn and twist our notions as we may, we never can, by mere analysis of notions, and unassisted by perception, discover their sum.

Just as little is any proposition of pure geometry analytic. That the straight line between any two points is the shortest, is a synthetic proposition. For my notion of straight includes in it nothing of quantity, but only a quality. The notion shortest is wholly something adscititious, something added to it, and cannot by any analysis be derived from the notion straight line. Perception, then, must be here called in to assist, and only by its intervention is the synthesis possible.

Some few propositions which are presupposed in geometry are, it is true, really analytic and rest on the principle of contradiction. They serve, however, only as identical propositions, for the chain of the method, and not as principles. For example, it is said a is equal to a, that is, the whole is equal to itself; or $a + b$ is greater than a, which is, the whole is greater than its part. And yet even these, that

pass valid on the authority of mere notions, are only allowed place in mathematic because they can be exhibited in perception. What commonly leads us here to suppose that the predicate of such apodictic judgments is already contained in our notion, and that, consequently, the judgment is analytic, is solely the peculiarity of the expression. To a given notion, namely, we must think a certain predicate, and this necessity is already present with the notions. But the question is not what we must think *to* the given notion, but what we actually, though obscurely, think *in* it; and then we see that the predicate belongs to the notion, necessarily indeed, not, however, because of being thought in it, but because of a perception which must be added to it.

2. Natural philosophy possesses synthetic *a priori* judgments as principles. I will only adduce a couple of propositions in example; as that in all changes of the corporeal world the quantity of matter remains the same, or that in all communication of motion, action and reaction are always alike. In both, not only the necessity is clear, and by consequence their *a priori* origin, but also the fact that they are synthetic propositions. For in the notion of matter I do not think its permanence, but only its presence in space as filling it. That is, I actually go beyond the notion of matter in order to think *a priori to* it something that I did not think *in* it. The proposition, therefore, is not analytic, but synthetic, and yet *a priori;* so it is with the other propositions of the pure part of the science.

3. In metaphysic (though we should only regard it as a science which has been hitherto desiderated, but which, from the very nature of human reason, nevertheless, is a science indispensable), synthetic cogni-

tions *a priori* simply *must be*. For it is not its business merely to unravel notions which we *a priori* form of things. On the contrary, the business here is to extend our *a priori* cognition; and to that we must avail ourselves of such propositions as add on something beyond the given notion, something not contained in it; and in this way, by means of synthetic *a priori* judgments alone, advance indeed so far that experience itself is unable to follow us. For example, there is the proposition, among others, that the world must have a beginning. And by this we see that metaphysic, at least in its aim, consists of pure *a priori* synthetic propositions.

VI.

General Problem of Pure Reason.

It is already not a little won, if we can bring a variety of questions under the formula of a single problem. For in this way, through exact determination of it, we not only lighten to ourselves our own work, but we facilitate for everybody else as well, who will examine it, the judgment whether we have done justice to our own design or not. The problem proper of pure reason, now, is comprised in the question, How are *a priori* synthetic judgments possible?

That metaphysic, hitherto, has remained in so vacillating a condition of uncertainty and contradiction, is solely to be ascribed to the fact that we have not sooner attained to the conception of this problem, or even to that of the distinction between analytic and synthetic judgments. On the solution of this problem now, or on a satisfactory proof that the possibility it would wish demonstrated does not

exist, it depends whether metaphysic shall stand or fall. David Hume, who of all philosophers came nearest to this problem, thought it not out, however, by any means determinately enough, or in its generality, but merely took his stand by the synthetic proposition of the connexion of the effect with its cause (*principium causalitatis*). Accordingly, he assumed to make out that such a proposition is, *a priori*, wholly impossible. His reasonings went to prove, indeed, that all we call metaphysic terminates in a mere delusion of a supposed insight on the part of reason, into what in effect is merely borrowed from experience, and has only taken on, through custom, the semblance of necessity. But such an allegation, subversive as it is of all pure philosophy, would never have occurred to him had he but caught sight of our problem in its universality. For he would have then been conscious that, on his argument, even pure mathematic would be impossible, inasmuch as it is a science built on *a priori* synthetic propositions—a conclusion, plainly, from which his own good sense would certainly have saved him.

In the solution of the above problem there is involved, at the same time, the possibility of an application of pure reason in foundation and completion of all the sciences in which any theoretical *a priori* cognition of objects is concerned; that is, an answer to the questions, How is pure mathematic possible? How is pure natural philosophy possible?

Of these sciences, inasmuch as they once for all are, we may certainly with propriety ask, how they are possible; for that they must be possible is demonstrated by their actuality.[1] As for metaphysic,

[1] This may be doubted as regards a pure natural philosophy. But we have only to look to the first propositions of physic proper (empirical), as

again, we may reasonably doubt of possibility in its regard, in view, namely, of its unsatisfactory progress hitherto, as well as of the fact that, considering its essential aim, we cannot say it has, in any instance, actually been.

And yet, again, knowledge of this kind is really, in a certain sense, to be assumed as given, or metaphysic is actual after all—if not as science, then as natural capability (*metaphysica naturalis*). For human reason, not moved by any vanity of mere learning, but impelled by necessity of its very nature, strives ever irrepressibly forward towards such questions as cannot possibly be answered by any mere empirical consideration, or principles derived thence. So it is that really in all men, so soon as reason has advanced to speculation, a metaphysic of some kind always has been and always will be. And now, from the same source, we have this question also: How is metaphysic as natural capability possible? That is, how do the questions which pure reason starts for herself, and which, in some way, she *must* answer—how do these questions originate in the very nature of reason as such?[1]

It is the fact, however, that unavoidable contradictions have always shown themselves in any attempt yet to answer these natural questions (*e.g.*, whether the world has had a beginning, or whether it exists from all eternity, etc.)? We cannot, therefore, remain satisfied with a mere natural capability for metaphysic, or with the mere faculty of reason itself, in possession

the permanence of matter in quantity, inertia, the equality of action and reaction, etc., to be convinced that they constitute a *physicam puram* (or *rationalem*), which certainly deserves to be separately established, in its whole extent, whether large or limited, as science proper.—K.

[1] Rosenkranz omits here a very important "die" (before "Frage"), as, near the end of the preceding section, a not unimportant "und."

of which there is always that necessity of a metaphysic of some kind, be it what it may. It must be possible, rather, to bring matters relatively to some certainty as concerns either the knowing or the not knowing of the objects in question, either the ability or the inability of reason to judge in their regard. That is, it must be possible for us either confidently to extend, or else duly limit, reason. This last question, which flows from the general problem, were rightly put thus: How is metaphysic as a science possible?

A criticism of reason leads, therefore, at last necessarily to science; while, without criticism, dogmatically to set to work with reason, results only in groundless allegations, to which others equally specious may be opposed, and the end, consequently, is scepticism.

Neither will this science be of great and forbidding extent. It is not with the objects of reason, namely, the multiplicity of which is infinite, but with reason's self, that it has to do. The problems it considers take birth in the bosom of reason only: they are not imposed upon reason by the nature of things, which are different from it, but by its own nature. Accordingly, therefore, if reason has, first of all, come perfectly to know its own powers in regard of objects which may be offered in experience, it must be easy fully and surely to determine the range and extent of its desired application beyond all bounds of experience.

We may and must, therefore, regard all these previous attempts dogmatically to bring about a metaphysic as, in effect, null. For, whatever there may be of analytic in the one or the other of them, as regards the mere dissection of the notions which *a priori* attend our reason, such material is not the end

and aim of, but only a preparation for, metaphysic proper. To this science it belongs, namely, to extend our synthetic *a priori* knowledge, and to that, said analytic material is inapplicable, as it merely shows what is contained in those notions, but not how we *a priori* attain to them. Accordingly, we are not enabled thereby to determine their due and valid use in regard of the objects of cognition generally. It is no great hardship to abandon such pretensions wholly, seeing that the undeniable and dogmatically inevitable contradictions of reason have long since cost every previous metaphysic all its credit. It will demand more self-reliance, in view of the difficulty within and the opposition without, to resist, in regard to a science indispensable to human reason (whose root, let us hew off whatever actual stems we may, it is impossible to tear up), discouragement from the attempt to further it, once for all at last, into a prosperous and fruitful growth, by means of another, and, to those in the past, wholly opposed method.

VII.

Idea and Division of a Special Science under the Name of a Critique of Pure Reason.

There results from all this, now, the idea of a special science, which may be named critique of pure reason. For reason is the faculty which furnishes the principles of *a priori* cognition. Pure reason will therefore contain the principles towards an absolute *a priori* cognition. An organon of pure reason would be a whole of those principles, in accordance with which all pure *a priori* cognitions can be acquired and actually realized. The complete application of such

an organon would have for result a system of pure reason. Inasmuch, however, as this is asking a great deal, and it is yet uncertain whether and in what cases an extension of our knowledge is in this way at all possible, we may conceive rather a science of the mere investigation of pure reason, its sources and limits, as the *propædeutic* to the system of pure reason. Such a science would necessarily be considered not a doctrine, but only a critique of pure reason; and its use in speculation would, in reality, be merely negative. Serving not to extend, but to clear reason, it would guard it from errors, which is already much. I call all cognition *transcendental*, which is occupied not so much with objects, as with the process by which we come to know them, in so far as that process has an *a priori* element. A system of such elements would be a transcendental philosophy. But, for a beginning, this again is too much. For such a science, necessarily embracing as well analysis as synthesis, would extend beyond our intention at present, seeing that we shall apply the former only so far as is indispensable for a complete survey of the principles of the synthesis *a priori;* which is our one general object. It is with this inquest that we now occupy ourselves—an inquest that cannot properly be named a doctrine, but only a transcendental critique, and for this reason, that it has in view, not the extension, but the clearing of our knowledge, and would seek to furnish merely a touchstone of the worth or worthlessness of our cognitions *a priori*. Such a critique, accordingly, is a preparation, so far as possible, for an organon, or, failing that, a canon, by means of which we shall certainly be able to realize, some time, a completed system of the philosophy of pure reason, as well analytic as synthetic, let it con-

sist, as it may, in extension or in mere limitation of the relative knowledge. For, that this is possible, nay, that such system cannot be of too great extent to allow the hope of completing it, may already beforehand be judged from this, that what constitutes the object here is not the nature of things, which is inexhaustible, but the understanding, which pronounces on the nature of things, and this understanding itself, too, only in regard of its cognition *a priori;* its provision of which, moreover, seeing that we have not to seek it from without, cannot possibly remain concealed from us, and in all likelihood is small enough to be perfectly taken up, duly estimated, and in worth or worthlessness competently appreciated. Still less must there be expected here a critique of the books and systems of pure reason, but only of the faculty itself that is so denominated. Only in such critique as basis have we a sure and certain touchstone whereby to try the philosophical worth of earlier or later works in this department; otherwise, we have only an unaccredited historian and judge pronouncing on the groundless opinions of others solely through opinions of his own which are equally groundless.

The transcendental philosophy is the idea of a science whereto the critique of pure reason shall sketch the entire plan—architectonically, that is from principles, with plenary guarantee of the completeness and security of all the pieces which compose the structure. It is the system of all the principles of pure reason. That this critique is not itself already the transcendental philosophy, depends solely on this, that, in order to be a complete system, it ought to comprehend, as well, a completed analysis of the entire human cognition *a priori.* Our critique, in-

deed, must certainly exhibit a complete enumeration of all the primitive notions which constitute the pure cognition in allusion. But from the detailed analysis of these notions, as from the detailed revision of their derivatives, it will rightly refrain; partly because such analysis were to little purpose, inasmuch as it has not the significance peculiar to the synthesis, which synthesis, properly, is the special motive of the entire critique; and partly because it would contradict the unity of the plan, to undertake the responsibility of the completeness of any such analysis and derivation; from which, indeed, in consideration of one's design, one might reasonably be dispensed. At the same time, it will be easy to supply this completeness of analysis and derivation from the *a priori* notions themselves, directly they are once for all established as the complete principles of synthesis, with nothing wanting to them in that essential reference.

According to this, then, there belongs to the critique of pure reason all that is constitutive of a transcendental philosophy, and of such philosophy it is the entire idea, but it is not that philosophy; because, on the side of analysis, it goes no further than is required for a complete estimate of the *a priori* synthesis.

As regards the divisions of such a science, the main consideration is, that there must be no admission for notions in anywise empirically tinged; or that the *a priori* elements must be perfectly pure. Hence the exclusion from transcendental philosophy of the principles of morality, notwithstanding that the chief moral notions and propositions are really cognitions *a priori*. And the reason is, that, as regards the notions of pleasure and pain, desire, passion, etc.,

which are all of empirical origin, said principles do not, indeed, regard these notions as basis of their own moral prescripts; but yet, in construction of the system of pure morality, they must necessarily admit them as (in duty) obstacles to be overcome or temptations to be resisted. The transcendental philosophy, therefore, is a philosophy of the merely speculative pure reason. For all moral practice, so far as it involves motive, refers to feeling, and feeling always is of empirical origin.

As concerns division, then, this our science will, on the usual general principles of such, consist of a theory, firstly, of the elements, and, secondly, of the method of pure reason. Each of these parts, again, will have its own sub-parts, the conditions of which, however, we do not discuss here. Only, it may be of advantage, perhaps, to be, introductorily, or prefatorily, reminded, that there are two stems of human cognition, sprung, both, it may be, from a common but unknown root, namely, sense and understanding, by the former of which objects are given to us, and by the latter thought. Even sense, then, if it be found to possess for us intimations *a priori*, which constitute conditions under which alone objects can be perceived by us, will, for that reason, enter as a constituent into a philosophy that is transcendental. And, accordingly, the transcendental sense-elements will necessarily constitute the first part of our theory of elements, inasmuch as the conditions under which objects are given precede those under which they are thought.

Transcendental Æsthetic.[1]

§ 1.

Let cognition refer itself to objects in what manner it may, perception is such reference direct or immediate; while the reference of thought, as only through perception, is mediate. Perception, again, takes place only so far as an object is given us, which for us men, further, is only possible in this way, that said object, in some certain way, affects our mind. The capability (receptivity) of receiving intimations through the mode in which we are affected by objects is called Sensibility. By sensibility alone, then, are objects given us, and sense alone affords us Perceptions; which being thought by Understanding, there result Notions. All thought must, at last, directly or indirectly, refer itself to perception and, consequently, to sense; for in no other way can an object be given us.

The effect of an object on our susceptibility of impression, so far as we are affected by it, is Sensation. Any perception that refers itself to an object through sensation is said to be Empirical. The undetermined (afterwards seen to be the *uncategorized*) object of an empirical perception is what we call an *Erscheinung* (a sense-appearance, a sense-presentation: it is the mere sensation in crude perception – time and space —but as yet without notion or category).

In this object, I call what corresponds to sensation (the mere feeling) its *matter;* while what again so acts that the units of the impression are, in each

[1] Kant's headings are mostly so compound that they give a look of difficulty of themselves. We translate here only what is simple and direct.

other's regard, peculiarly disposed (as so and so beside each other, or so and so after each other), I call its *form*. As this latter constituent (the *order* in the units of impression) cannot possibly be itself sensation, we must hold that, while the matter of impression is only *a posteriori* given, its form, on the contrary, must *a priori* lie ready for all impression in the mind, and be capable, therefore, of separate consideration, apart from sensation.

I call all intimations pure (in transcendental sense), in which there is nothing found that belongs to sensation. The pure *form* of sensuous perception, consequently, will be met with *a priori* in the mind, wherein all units of impression are perceived in certain relations. This pure form of sense or sensibility, accordingly (as without sensation), may be legitimately named *pure perception*. Thus, when I withdraw from what makes up my consciousness of a body, what elements in it belong to the understanding, as substance, force, divisibility, etc., and again what elements in it belong to sensation, as impenetrability, hardness, colour, etc., still, of this empirically perceived object, there remains something over, namely, extension and figure. These belong to pure perception which, as a mere form of sensibility, and without any actual object of sense or sensation, exists in the mind *a priori*.

A science of all the *a priori* principles of sense, I call Transcendental Æsthetic.[1] There must, therefore, be such science which, constituting the first part of the transcendental theory of elements, will oppose itself to the second part, which is devoted to the

[1] In a note here Kant vindicates this word for his own use of it, and against that of Baumgarten. To this note the second edition adds a clause which is wanting in that of Rosenkranz. The note itself is omitted here as of no importance.

principles of pure understanding, and is named Transcendental Logic.

In the transcendental æsthetic, we shall isolate sense, first, by withdrawal of all that the understanding thinks into it through its notions, and second, by further withdrawal, from the bare empirical sense-presentation that then remains, of all that belongs to sensation. For result we shall have nothing but pure perception and the mere form that adds itself to sense-matter; and that is all that the sensibility can *a priori* yield. But, through such investigation, it will be found that, as principles of *a priori* cognition, there are two pure forms of sensuous perception, namely Space and Time, with the consideration of which we shall now occupy ourselves.

Section I.—Of Space.

§ 2. Metaphysical Exposition of this Notion.

By means of external sense, which is a function of our mind, we perceive objects as external to ourselves, and collectively in *space*. In it their figure, magnitude, and relation the one to the other, are determined or determinable. Inner sense, by means of which the mind contemplates itself, or its internal condition, furnishes, indeed, no perception of the soul itself as an object; but there is, nevertheless, a single determinate form, in connexion with which the perception of its internal state is alone possible; or all that belongs to our inner affections presents itself in relations of *time*. Time can be as little perceived externally, as space can be perceived as

though it were something internal. What, then, are space and time? Are they actual things on their own independent account? Are they only affections, or, it may be, relations of things, but such that they would attach to things in their own selves, even if these things were not perceived? Or are they such (affections or relations) that they only hold of the form of the function of perception, and, consequently, of the subjective conformation of our mind, without which they could not be predicated of anything whatever? For answers here we will first discuss the notion of space. I understand, however, by discussion or exposition the distinct statement (if not at full) of what belongs to a notion. Such exposition is metaphysical, moreover, when it demonstrates the notion to be given *a priori*[1]

1. Space is not an empirical notion which has been derived from external experience. For, that certain sensations are referred to something out of me (that is, to something in another part of space than that in which I am), and further, that I can perceive them as out of and near each other, consequently, then, not merely as different themselves, but as in different places: to that the perception of space must be already presupposed. Accordingly the cognition space cannot be derived from the relations of external impression, through experience; but, contrariwise, this external experience is itself only possible through said cognition.

2. Space is a necessary perception *a priori*, which is presupposed by, and underlies, all external perceptions. We can never realize to ourselves the conception of there being no space, though we can

[1] This last very important sentence seems omitted by Rosenkranz, as also a single not very important word in the next paragraph.

perfectly well think of no objects being found in space. It is taken for granted, therefore, as condition of the possibility of the appearance of objects to external sense, and not as an affection or form dependent upon objects: it is an *a priori* perception, which is necessarily presupposed as ground (or canvas) for the reception of all external consciousnesses.

3. Space is not a discursive or, as we say, general notion of the relations of things, but a pure perception. For, firstly, we can conceive only a single space, and when we speak of spaces, we mean only parts of one and the same sole space. These parts cannot precede, either, the one all-comprehending space as though they were the particulars from which it is generalized; but, on the contrary, they are only thought *in* it. It is essentially one; any plurality of parts or units in it (consequently, also, the general notion of spaces) rests solely on limitations of itself. From this it follows that a perception *a priori* underlies all notions of it. This is the reason why every geometrical proposition, as, for example, that any two sides of a triangle are together greater than the third side, is never by any possibility to be deduced from mere general notions of triangle, line, etc., but from perception, and *a priori*, with apodictic certainty.

4. Space is conceived as an infinite magnitude there before us. Now a notion must be conceived, indeed, as common to an infinite number of different possible individuals (it is their common type), which individuals, therefore, it holds under it; but no notion as such can be so thought as though it contained an infinite number of individuals *in* it. But it is thus that space is thought (for all the parts of space

are at one and the same time together in it *ad infinitum*). Consequently the original of space is perception *a priori*, and not notion.

§ 3. Transcendental Exposition of the Notion of Space.

By transcendental exposition I understand the demonstration of any notion as a principle such, that, through it or from it, the possibility of other *a priori* synthetic cognitions may be understood. The requisites here, then, are: 1, that such cognitions actually do derive from the given notion; 2, that these cognitions are only possible on presupposition of a certain mode of interpreting or explaining the given notion.

Geometry is a science determinative of the properties of space, synthetically, but yet *a priori*. What must space itself be, then, that such cognition is possible of it? It must be originally perception; for no propositions that, as is the case in geometry (Introduction, V.), exceed (contain more than) a notion, can possibly be derived from that notion. The perception, again, must be *a priori*, or found in us before any special sense-perception; pure, therefore, or non-empirical. For geometrical propositions are all apodictic; that is, they bring with them their own necessity; as the proposition, for example, that space has only three dimensions. But such propositions cannot be empirical judgments (judgments of experience); neither can they be inferred from these (Introd., II.)

How, now, can there be in the mind an external perception, which yet precedes any perception of objects, and in which (from *its* nature, namely) the *notion* of these may be *a priori* determined? In no

other way, plainly, than that this perception has its seat only in the subject, as mere form of general external sense, or as mere *formal* susceptivity of the subject in assumption of objects when affected by them; through (and with) which, then, there is obtained *immediate cognition*, that is, *perception*, of these objects.

Our explanation alone, therefore, makes geometry conceivable as a synthetic cognition *a priori*. Every mode of explanation which does not effect this, whatever similarity it may exhibit, can, in the surest way, through this characteristic, be distinguished from it.

Inferences from these Ideas.

a. Space exhibits no property of things in themselves, nor yet themselves in their own mutual relations. It neither represents nor conveys any affection or attribute of things, which were theirs in themselves, and which would remain even if abstraction were made from every subjective condition that belongs to perception (as a function). For neither absolute nor relative attributes can *a priori* be perceived, that is, before existence of the things themselves in which they are found.

b. Space is nothing else than merely the form of all presentations in external sense. It is that subjective condition, under which alone external perception is possible for us. Inasmuch, now, as the susceptibility of the subject to be affected by objects necessarily precedes any perception of these objects, we can easily understand how the form of all perceptions may be already present in the mind before all or any actual special perception, and, consequently, *a priori*. So present in the mind, we can readily understand,

also, how *it*, this form, as a pure perception, in which all objects, as presenting themselves in it, must submit to determination from it, may possess principles of the relations of things before any experience.

Only, then, from the point of view of a human being is it that we can speak of space, of extended substances, etc. Directly we discount the subjective condition under which alone external perception is possible to us (so far, namely, as we may happen to be affected by objects), the expression space is without meaning. This term is referred to things only in so far as they appear to us, only in so far as they are objects of sense. The invariable *form* of this receptivity, which receptivity we name sense or sensibility, is a necessary condition of all the relations in which objects are perceived as external to us; but these objects being abstracted from, it is only a pure perception (a void subjective form) which has got the name space. Inasmuch as we cannot make the peculiar conditions of sense, conditions as well of the very *possibility* of things, but only of their *appearance to sense*, it is impossible for us to say that space contains all things *as they are in themselves*, no matter what subject perceives them, and no matter whether they are perceived or unperceived by any subject, but only that it contains all things so far as, externally, they *sensuously appear*, and to *us*. For, as regards the perceptions of other thinking beings, we cannot at all judge whether they are confined to the same conditions which limit our perception and are universally binding for us. Only when we add the *mode* to judgments, do they become unconditionally true. The proposition, All things are together in space, holds good under the limitation that these things are understood to be objects of our perception of sense. When I add the

condition here, and say, All things, as *external perceptions*, are together in space, then the rule is valid universally and without restriction. Our exposition asserts, therefore, the *reality* of space in regard to everything that may come externally before us as an object, but no less the *ideality* of this same space in regard to things when these things mean things *in themselves* as taken up in their truth by reason and without reference to the special nature of our sensibility. We maintain, therefore, the *empirical reality* of space in regard of all possible external experience, but also its *transcendental ideality*, in this respect, that it is nothing so soon as we cease to regard it as condition of the possibility of all experience for us, and assume it, rather, to be something that is involved in the very nature of things in themselves.

But, besides space, there is no other external cognition which, though subjective, can be called objective, and that, too, *a priori*. For from no other can we derive synthetic *a priori* propositions, as we derive them from perception in space, § 3. Hence, to speak accurately, ideality attaches to no such others, even though agreeing with space in this, that they belong merely to the subjective nature of the particular form or mode of sense, — of sight, hearing, feeling, for example, through the sensations of colours, sounds, warmth; which, at the same time as well, being merely sensations and not perceptions, enable us, of themselves, to know no object whatever, and certainly not possibly *a priori*.

I say this only to prevent resort on our part to inadequate exemplification of the ideality concerned, as from colours, taste, etc., which are rightly enough regarded, not as qualities of things, but as changes of our own subject; which, further, may even be dif-

ferent in different individuals. For, in that case, what is originally only appearance to sense, say a rose, notwithstanding that it may differ in colour to every different eye, is still held valid in the empirical understanding as a thing in itself. On the other hand, the transcendental understanding of perceptions in space is a critical reminder that nothing at all that is perceived in space is a thing in itself, and that space itself is not a form of things which were appertinent to them in themselves; but that the things in themselves are not at all known to us, and that what we call external things are nothing else than mere presentations of our own sensibility; of which presentations the form is space, but of which, again, the true correlates, that is, the things in themselves, neither are nor can be known thereby; after which things, indeed, there is never in experience even any inquiry.

Section II.—Of Time.

§ 4. Metaphysical Exposition of the Notion of Time.

1. Time is not an empirical notion which has been derived from any experience. For co-existence and succession would not themselves be found in the things perceived, were not time *a priori* implied. Only on the pre-supposition of time is it conceivable that some things are at one and the same time (together) or that others are in different times (after one another).

2. Time is a necessary cognition which is implied in all perceptions. We cannot suppress time as in regard to things, but we may very well suppress

things as in regard to time. Time, therefore, is a datum *a priori*. Only in it is all actuality of things possible. These may fall away bodily, but it (as the universal condition of their possibility) cannot be dispensed with.

3. On this *a priori* necessity, the possibility of apodictic propositions in regard to relations of time, or axioms in regard to time generally, is established. It has only one dimension: different times are not together, but after one another (just as different spaces are not after one another, but together). These propositions cannot be derived from experience, for experience would yield neither strict universality nor apodictic certainty. Were experience the source, we should only be able to say: That is what common observation tells us; but not: That is what, of necessity, must be. These propositions are binding as rules, under which experience, generally, is possible, and advise us before it, not through it.

4. Time is not a discursive or, as we say, general notion, but a pure form of sense-perception. Different times are only parts of precisely the same time. The cognition which can be yielded only by a single object is perception. The proposition, also, that different times are never co-existent cannot be deduced from a general notion. It is a synthetic proposition, and not dependent on mere notions. It is directly implied, therefore, in the simple perception and conception of time.

5. The infinitude of time amounts to no more than that every particular magnitude of time is possible only through limitations of a one universal underlying time. Hence the original cognition time must be given as unlimited. That object, however, the parts and every magnitude of which can be conceived

as determined only through limitations, cannot, as a totality, be given through notions (for notions only contain subnotions which, as particulars, precede their principals),[1] but must involve a direct perception.

§ 5. Transcendental Exposition of the Notion of Time.

I may refer in this connexion to § 4, No. 3, where, for the sake of brevity, I have introduced into the metaphysical exposition, what, properly, is transcendental. I add now that the notion of change (with that of motion as local change) is possible only through and in time: that if time were not perception *a priori* (internal), no notion whatever could make intelligible the possibility of a change; that is, of a conjunction in one and the same object of predicates contradictorily opposed the one to the other (as the being and not being of one and the same thing in one and the same place). Only in time can such predicates be found together in the same thing—*i.e.*, *after one another*. And so our view of time explains the possibility of

[1] I have conveyed here both forms of the parenthesis found in the two editions. Kant's "parts" and "parts of composition" give pause, especially in the number 3 of Space. This very parenthesis (even in its two forms), however, is, perhaps, decisive. Comparison and reflection seem to me undeniably to demonstrate that Kant had no idea but that of contrasting perceptive parts with notional parts, and that even by the words "Bestandtheile" and "Zusammensetzung" (§ 2, No. 3) he meant only subnotions and generalization. The words themselves are unhappy, however; and much is inexact throughout these sections. Consider the confusion, grammatical and other, of the sentence to which this is note. Literally translated, it would run thus:—"Whereof, however, the parts themselves, and every magnitude of an object, can be conceived determined only through limitations, there the whole cognition must not be given through notions (for these contain only part-cognitions), but there must underlie them immediate perception." The "whereof," the "every magnitude of an object," the "whole cognition," the "them," all most obliquely put, refer, however helplessly, to the one subject or object which is alone spoken of. In Rosenkranz all is even worse.

as much synthetic cognition *a priori* as is demonstrated by the general theory of motion, which is not a little fruitful.

§ 6. Inferences from these Ideas.

a. Were abstraction made from all subjective conditions of perception, time would not be found to remain, whether as something self-subsistent and on its own account, or as an objective quality inherent in things themselves. For, in the first case, it would be something which, without actual object, were, nevertheless, itself actual. And, in the second case, it would be impossible for it, as a quality or order belonging to things, to precede these things, as their very condition indeed, and be, through synthetic propositions, *a priori* cognised and perceived. This latter circumstance is very intelligibly possible, should time be the subjective condition only under which all perceptions in us can take place. For in that case this form of inner perception is in consciousness before the objects, and, consequently, *a priori.*

b. Time is nothing but the form of internal sense, that is of the perception of our own self and of our own inner state. For time results not from any determination of outer objects; it is not referred to anything that has bodily shape or place, etc.; on the contrary, it is time that, for all presentations in our inner consciousness, determines their relation. And just because this inner perception offers no shape, we seek to supply its place by analogies. We picture time-succession as a line that proceeds into infinitude, the complex of parts in which, moreover, constitutes a series which is only of one dimension. From the qualities of this line, too, we conclude to all the qualities of time, except this single one that, while in

the line all the parts are at once and together, those in time are always successive or after one another. From this it is evident that time is a perception; for all its relations are capable of being expressed in external perception.

c. Time is the formal condition *a priori* of all sense-perceptions. Space, as the pure form of all outer perception, is limited, in its function of *a priori* condition, merely to external objects. On the other hand, because all cognitions, whether due to external things or not so due, do, so far as they themselves are concerned (in that they are affections of mind), belong to our inner state—further, because this inner state must come under the formal condition of inner perception which is time—it follows that time is an *a priori* condition of all sense-perception, immediately of internal (the soul) and mediately (*i.e.*, through it) of external perception. As, in the external reference, I can say, All external perceptions are in space and *a priori* determined according to the relations of space; so, in the internal reference, I can equally say, All perceptions whatever (all objects of the senses) are in time, and fall necessarily under relations of time.

If, from our mode of internally perceiving ourselves, and accordingly disposing in consciousness all external perceptions, we abstract, and, consequently, take objects as they may be supposed to be in themselves, then time is nothing. It is only of objective validity in regard to perceptions, because we recognise these as *objects of our senses;* but such validity disappears directly we abstract from what mode of consciousness is peculiar to us (which is that of a perception only through sense)—directly we speak, namely, of *things as such.* Time, therefore, is solely a subjective condition of our (human) perception (which is in every

case sensuous, objects being conceived to act on us); and, *in itself*, apart from the subject, nothing. In regard of all perceptions, however, consequently of all things which may appear in experience, time is no less necessarily objective. We cannot say, All things are in time; for such expression bears to consider things as they are in themselves, and apart from the mode and conditions of the perception of them; whereas it is precisely the mode and conditions of perception from which it follows that time adds itself to all objects in consciousness. But subjoin now the *mode* to the proposition, and say, All things are, as objects of sense-perception, in time; then the judgment has its own good objective truth and universality *a priori*.

Our doctrine asserts, then, the *empirical reality* of time; that is, its objective validity in regard of all objects which may, on any occasion, be offered to our senses. And as our perception is at all times one of sense, there never can be given us an object in experience which is not submitted to the condition of time. But, again, we deny time all claim to *absolute reality*, if regarded as intrinsic condition inherent in things themselves, irrespective of the form of our sensuous perception. Such attributes as belong to things in themselves can never be made known to us by the senses. In this, then, consists the *transcendental ideality* of time; which, abstraction being made from the subjective conditions of sensuous perception, is absolutely nothing; and cannot be attributed to objects in themselves (or apart their relation to our perception), whether as subsistent or as inherent. But this ideality is just as little as that of space to be put upon a par with the subreptions of sensation; in whose despite, there is attributed to the subject of

such predicates an objective reality, which is without place here (for time or space), unless in so far as such reality were regarded as merely empirical or attributed to the object (time or space) only as a perception of sense: on the distinction in question, however, see § 3, *b*, two last paragraphs.

§ 7. Further Explanations.

Against this theory, which grants empirical but denies absolute or transcendental reality to time, I have heard an objection so common on the part of intelligent men, that I infer it must occur naturally to every reader, to whom such speculations are unusual. It runs thus: Changes are actual, as is demonstrated by the vicissitude of our own mental states, even should we leave out of view all external perceptions (together with their changes). But changes are only possible in time. Therefore time is something actual. The reply has no difficulty. I grant the entire argument. Time is undoubtedly something actual; it is the actual form, namely, of internal perception. It has therefore subjective reality in regard of inner experience; *i.e.*, I have actually the consciousness of time, and of my determinations in time. It is actual, consequently, not as an object, but as the mode of my perception of myself as an object. But if I (or another) could perceive myself without this condition of sense, the same states, which we now call changes, would yield a cognition into which no idea of time, or consequently of change, would at all enter. There remains to it, therefore, its empirical reality as condition of all our experiences. Only absolute reality, in accordance with what has been said, cannot be allowed it. It is nothing but

the form of our inner perception.[1] If we withdraw from it the peculiar condition of our sensibility, its very idea disappears; for time is not inherent in things themselves, but simply in the subject perceiving them.

But the reason why this objection is so universal, and on the part of those, too, who have nothing decided to advance against the doctrine of the ideality of space, is this. The absolute reality of space they could not hope apodictically to demonstrate in view of *idealism*, according to which the actuality of external things is incapable of rigorous proof. Whereas the actuality of the object of our internal senses (my own self, my own state) is immediately clear in consciousness. The former may, possibly, be a mere show, while the latter is, in their opinion, something undeniably actual. They do not consider that both, without our presuming to deny their actuality in consciousness, are, nevertheless, only appearances to sense, which has always two sides. There is one side, for example, in regard to which the object is viewed as in itself (apart from the mode of its perception, in which respect its nature is always problematical). And there is another side where the form of the perception is considered; which form must not be sought for in the object as in itself, but in the subject to which it appears; at the same time that said form belongs, nevertheless, actually and necessarily, to the appearance of the object.

Time and space, accordingly, are two sources of cognition, from which, *a priori*, various synthetic

[1] I can, indeed, say, my states follow one another; but that means no more than that we are conscious of them in a sequence of time, *i.e.*, according to the form of inner sense. Time is not by any means, therefore, something in itself, nor yet any attribute objectively inherent in things.—K.

propositions may be derived, as is especially exemplified in pure mathematic with regard to space and the relations of space. Taken together, namely, they are both pure forms of all sense-perception, and thereby render synthetic propositions *a priori* possible. But these cognitive sources *a priori* determine their own limits just by this reference to their being conditions (forms) of sense: they concern objects, that is, only so far as objects are considered perceptions of sense, and not things in themselves. Valid only for the former, they at once cease to have objective application directly we go beyond them. Such reality of space and time leaves, for the rest, the certainty of our empirical knowledge unaffected; for in its regard we have an equal certainty, whether these forms are of things in themselves, or only of our perception. Whereas they who maintain the absolute reality of space and time must, whether they assume subsistence or only inherence, be at variance with the principles of experience itself. For, say they assume the former, as the mathematical inquirers mostly do, then they have before them two eternal, infinite, and self-subsistent non-entities (space and time) which, without being themselves anything actual, are there, for all that, for no other purpose than just to embrace all that is actual! Or say they assume the latter (inherence), as is, in effect, the case with certain metaphysical dogmatists, then, inasmuch as space and time are for them relations of things (the *beside* one another, the *after* one another) derived from experience, but necessarily only confusedly so, they (these dogmatists) must impugn the validity, or at least the apodictic certainty, of any mathematical assignments *a priori* in regard of actual things (*e.g.*, in space). For such certainty is not possibly to be obtained from expe-

rience; and any *a priori* notions of space and time can, under such suppositions, be no more than creations of imagination. That is, their source must actually be sought for in experience so far as imagination, out of the relations abstracted from experience, has made a certain universal of these, but a universal, nevertheless, still under the restrictions imposed by nature upon the relations from which it derives.[1] The party for the former opinion have the advantage that, for their mathematical allegations, they leave the field of the experiences of sense free. But then they very much perplex themselves by these very conditions, when the understanding would go beyond this field. The party for the latter opinion, again, have the advantage that space and time are not difficulties to them, when they would judge of objects, not as perceptions of sense, but only in relation to the understanding. But they are unable either to explain the possibility of mathematical cognitions *a priori* (for any true and objectively valid perception *a priori* does not exist for them), or to bring the findings of experience into necessary agreement with these cognitions. In our theory of the true nature of these two primitive forms of sense, both difficulties are removed.

Lastly, that the transcendental æsthetic cannot include more than these two elements, is evident from this, that all other notions which hold of sense (even

[1] Were all Kant's sentences like the above, De Quincey's ridicule would be very much in place. I have broken it up, and done my best with it, but I fear its import must be still obscure. What is said of the mathematicians seems plain enough; and as regards the metaphysicians, all that I take to be intimated is, that, all being *a posteriori* with them, they must find themselves at a non-plus in face of the *a priori*; while, further, their universals of time and space, derived only from the action of the imagination on the contributions of sense, must submit themselves to the restrictions of that, their empirical source.

motion, which is a union of both) presuppose something empirical (as subjects or objects of them). Motion, for example, presupposes perception of something that is movable. In space, however, taken by itself, there is not anything that is movable. Therefore what is movable must be something that is only found in space by experience, or that is only an empirical datum. For the same reason, also, the transcendental æsthetic cannot count among its *a priori* data the notion of change; for time itself undergoes no change; only what is in time undergoes change. For that notion there is required, therefore, the observation of some actual existence and of the succession of its states, *i.e.*, of experience.

§ 8. General Remarks on the Transcendental Æsthetic.

I. First it will be necessary to explain as clearly as possible what, in regard to the nature of sense-cognition, our opinion is, in order to preclude all misunderstanding in that respect.

It has been our wish to say, then, that all our perception is nothing but the impression of sense (the state of mind due to sense-presentation); that the things we perceive are not in themselves as we perceive them; that this holds good of their relations as well; and that, were our subject abstracted from, or simply the subjective constitution of our senses, all the qualities and all the relations of objects in space and time—nay, space and time themselves—would disappear: for all of these are, as mere appearances to sense, incapable of existing in themselves, but only in us. How it may be situated with the objects in themselves, and apart from our receptivity of sense, remains wholly unknown to us. We know nothing

but our manner of perceiving them, which, as peculiar to us, is necessary to us, but not therefore necessary to every other intelligence. But it is with the perception peculiar to ourselves that we have alone to do. Time and space are its pure forms, and sensation its matter. Only the former can we cognise *a priori*, or before actual perception of sense, and for that reason we name them pure perception. The latter, again, as that in our cognition which is only *a posteriori*, we name empirical perception. The former belong to our sensibility absolutely necessarily, let our sensations be as they may; and very various they may be. Though we should bring our perception to never so high a degree of keenness, we should not, for all that, be a bit nearer the nature of objects in themselves. For, in every event, we should only be present to our own mode of perception, to our own sensibility — only to this sensibility, moreover, as under the originally-inherent, subjective conditions of space and time. What the objects may be in themselves can never possibly be known to us by even the most luminous cognition of their appearance to sense, and it is that appearance which is alone given us.

Wherefore, that our whole complex of sense is nothing but a confused cognition of things, possessed, indeed, of what belongs to them in themselves, but only in the midst of such heaping together of characters and part-perceptions as renders it impossible for us consciously to distinguish them — this is such a falsification of the very idea of sense or of object of sense, that it reduces the whole theory of these to vanity and inanity. The difference of an indistinct from a distinct consciousness is simply logical, and does not refer to the contained matter as the contained matter. There is no doubt that the

notion Right (Recht), for example, even as used by the ordinary understanding, involves all that the subtlest speculation can develop from it; differing from the latter only in this, indeed, that it is without consciousness of the many details of the thought. But all this gives us no reason to say that the common notion is only one of sense or appearance to sense; for Right cannot by any possibility come before sense at all. Right is a notion, its seat is in the understanding; and it is a (moral) quality of actions which belongs to these in themselves. On the other hand, the idea of a body in perception contains nothing at all that were capable of belonging to an object in itself. We have in it only appearance to sense, or the manner in which we are thereby affected; and this receptivity of our cognitive faculty is called sense or sensibility, and remains, from a cognition which should concern an object in itself, even if the sense-appearance were seen to the very bottom, nevertheless diametrically different.

The Leibnitz-Wolfian philosophy has, therefore, to all investigations into the nature and origin of our knowledge, assigned quite a wrong point of view. To it, namely, the difference of sense and intellect was wholly logical, whereas, in effect, it is manifestly transcendental. It is not the form of distinctness or indistinctness that is concerned in this difference, but the origin and nature of our knowledge. From which it results that, through sense we know the nature of things in themselves, not indistinctly only, but absolutely not at all. So soon, indeed, as we leave out of view our own subjective conformation, the qualities of the object (as attached to it by sense) and the perceived object itself are nowhere to be found; for it is just this subjective confor-

mation which determines the form of the object as an appearance to sense.

We do usually, it is true, distinguish in objects what is substantial in the perception of them, what in them is valid for every human consciousness, from what, again, is only contingent in them. The latter, namely, unlike the former, is not referred to sentiency as such, but only depends on a special situation or organization of this or the other sense. Or the former is considered such a cognition as perceives the object in itself; the latter, again, only such as perceives the object in its appearance to sense. But even this distinction is, after all, only empirical. If we remain by no more than this (as is commonly the case), and fail to regard (as we ought) such empirical perception as itself again but mere sense-appearance, in such wise, namely, that there is nothing at all to be found in it that concerns anything whatever in itself, then our transcendental distinction is all lost. For, so, we believe that we perceive things in themselves; whereas, nowhere in the world of sense, let us search into its objects as deeply as we may, have we ever anything to do but with sense-appearance. Thus it is that, in the case of a sun-shower, we call the rainbow a mere appearance of sense; at the same time that we take the rain to be the thing in itself. Nor is this incorrect, in so far as we regard the rain only physically, as what, in experience generally, under whatever position to sense, is, in perception, always thus and not otherwise determined. Should we take, however, the empirical phenomenon all together, and ask, without any reference to the distinction of agreement or not with every human sentiency, whether this phenomenon as a whole indicates an object in itself (not

indicates the rain-drops as such object, for they are themselves empirical objects), then the question of the relation of the perception to the object is transcendental. For not only these drops are appearances of sense; but their rounded form, nay, the very space in which they fall, are nothing in themselves unless mere modifications of our senses (the colours, etc.), or groundworks of our sense-perception generally (space, etc.); while the transcendental object, for its part, again, remains wholly unknown to us.[1]

A second important characteristic of our transcendental æsthetic that demands notice is this. It is not something that should gain some favour merely as a plausible hypothesis. On the contrary, it is as certain, and as free from doubt, as can ever be required of any theory that shall act as an organon. In order to make this certainty fully conspicuous, we shall take a case, the evidence of which may prove irresistible as well as throw additional light, perhaps, on what has been said in § 3.

Suppose, then, you take space and time to be in themselves objective, or to be conditions of the possibility of things in themselves. In that case this fact courts notice, that a great number of *a priori* apodictic and synthetic propositions presents itself from both, but more especially from space, which, therefore, we shall preferably refer to in example. Now, I ask you, as the propositions of geometry are known synthetically *a priori* and with apodictic certainty, whence do you derive these propositions, and on what does under-

[1] As we never at all know the object in itself, we may be apt to think that Kant ought to have called it, not *transcendental*, but *transcendent*. The *Ideas*, however, though transcendent as cognitions, are *regulatively* transcendental in experience. In the same way, the object in itself, as necessary to and in experience, is, though transcendent in cognition, a *constitutively* transcendental element.

standing support itself in dealing with them? Source or support there can be none, but either in notions or perceptions; and from both of these, again, either only as *a priori* or else as *a posteriori*. But empirical notions or empirical perceptions are only adequate to what is itself, again, only empirical. They are incapable of the necessity and absolute universality that are characteristic of the propositions in geometry. Even *a priori* notions we are called upon to eliminate here; for it is clear that, from mere notions, there cannot be got any synthetic, but only an analytic cognition. Take the proposition, for instance, Two straight lines cannot inclose a space or construct a figure, and try to deduce it from the notion of straight lines and the number two; or say even that a figure is possible with three straight lines, and try this with mere notions. All your trying is in vain, and, like geometry itself, you find you are compelled to have recourse to perception. You take an object in perception, then; but your perception here must, as already shown, be an *a priori* and not an empirical perception. You must feel, in answer to our question, consequently, that the source and the support required in geometry are *a priori* perception. Were there not within you a faculty of perception *a priori;* were this subjective condition not at the same time, in form, the universal condition *a priori* under which alone the object of this (external) perception is itself possible; were the object (triangle) something in itself irrespective of your subject: how could you say, that what for construction of a triangle lies necessary in your subjective conditions, must necessarily be found also in the triangle itself? It was impossible for you, confined to notions (of three lines), to add to them something new (the figure), which, therefore, must

necessarily be conveyed by the object, inasmuch as this object is a datum before your cognition (of the proposition in question), and not through that cognition. Were not space, consequently, a mere form of your perception, involving conditions *a priori*, under which alone things can be for you external objects, as without them they were nothing, you would be quite unable to determine anything synthetically and *a priori* in respect of external objects. It is therefore indubitably certain, and not merely possible or probable, that space and time, as the necessary conditions of all (outer and inner) experience, are mere subjective conditions of all our perception. In relation to these conditions, consequently, all objects are mere sense-appearances and not things on their own account. It is just because of these *a priori* sense-conditions, too, that much as regards *form* may be *a priori* said of sense-objects, though never the smallest word of the things in themselves that may possibly underlie these sense-objects.

II. In confirmation of this theory of the ideality as well of external as internal sense, and, consequently, of all objects of sense as mere sense-appearances, it may prove signally serviceable to remark: That whatever belongs to our external perception, involves nothing but mere relations, as of places in a perception (extension), change of places (motion), and laws determinative of such change (motive forces). But, further, what is in the places, or what apart from the local change acts in the things themselves, is not at all made known thereby. Now, through mere relations, there is not anything in itself given. It is easy to judge, consequently, that, external sense yielding us nothing but intimations of relation, said sense is competent to convey the relation of an object to the subject in perception of it, but not the inner consti-

tution that belongs to the object in itself. With internal perception the case is the same. Leaving out of view that even there the contributions of external sense constitute the material proper with which we furnish our minds, it is to be said that time, in which we place these contributions,—which itself precedes consciousness of these in experience, and is presupposed as underlying formal condition of the manner in which we place them in the mind,—that time already prescribes, I say, relations of succession, of co-existence, and of what is implied with succession (a substrate that persists). Now, what, as a cognition, can precede all action to think anything, is perception, and, if it convey nothing but relations, only the *form* of perception. But, as this form of perception is only operative so far as the mind has an object in it (contents), it can be nothing else than the mode in which the mind, through its own action (the *placing* of contents), is affected—the mode, then, in which the mind is affected by its own self. This, plainly, amounts to an inner sense, or to an inner sense at least on the side of the form. All that is perceived by sense is always, so far, sense-appearance. An internal sense, therefore, would either require not at all to be admitted, or, if admitted, it would require to be seen that the subject, which is the object of such sense, could be perceived by it only as sense-appearance, and not as it would be judged to be by its own self, were its perception intellectual, or product of its own spontaneity. All difficulty here concerns the question alone of how a subject can internally perceive its own self; but this difficulty is common to every theory. Consciousness of one's self (apperception) is the simple cognition *Ego;* and were, thereby alone, all complex of elements constitutive of

the subject *spontaneously* given—in that case the internal perception would be intellectual. In man consciousness requires internal sense-perception of the complex that is given in the subject; and the manner in which, without spontaneous action of the mind, this complex is presented to the mind, must, for the sake of the distinction implied, be called sense. If consciousness is to take up (apprehend) what is in the mind, it must affect it; and is only able in this way to effect a perception of itself. The form of this perception, however, already in the mind, determines as in time how the complex is collocated in the mind. In a word, consciousness perceives itself, not as it would perceive itself were it immediately self-active in perception, but according to the way in which it is internally affected; consequently, as it sensuously appears to itself, not as it is.

III. When I say the object of perception, whether external or internal, is exhibited in space and time only as it affects our senses, or as it appears, I do not mean by that, that said object is a mere deception. For, in sense, the objects, nay, even the qualities we attribute to them, are always regarded as something actually given. Only, the particular subject's particular mode of perception being considered, a distinction is made between the object viewed as appearance to sense, and again as a thing in itself. So to speak, the single object of consciousness is, as phenomenon, or mere appearance before sense, distinguished from its own self as noumenon or thing in itself before reason. When I maintain, therefore, that the quality of space and time, in measure of which quality, as condition of their very being, both external and internal object must set themselves—when I maintain that this, the quality of space and

time, lies in me, in my mode of perception, and not in said objects in themselves, I by no means say that the one object (the things without) merely deceptively seems outside of me, or that the other object (my own soul) merely deceptively seems given in my self-consciousness. It would be my own fault, if I made a deception of what was an object of sense proper—if I made Schein of what was an Erscheinung.[1] Such a blunder is no result of our principle, however—of the ideality, that is, of all our perceptions of sense. Rather, were *objective reality* attributed to our said sense-forms, the result then would be the unavoidable transformation of all and everything into a mere mock-show. For, were space and time regarded as entities such that, in their very possibility, they were necessarily found in things in themselves, then we should have before us two infinite things which, though not substances, nor even any-

[1] *In relation to sense*, the predicates of sense may be allowably attributed to the object (Erscheinung), as redness or fragrance to the rose. But illusion, false show (Schein), can never be attributed as predicate to the object. And the reason is that, in the case of illusion, we attribute to the object in itself what belongs to it only in relation to sense, or indeed to a subject generally; as, *e.g.*, the "two handles" were attributed at first to Saturn. What is not at all to be found in the object in itself, but always in its relation to the subject, and is inseparable from the perception of the former, is sense-appearance; and the predicates of space and time, consequently, are rightly attributed to the objects of the senses as such. That is sense-appearance (Erscheinung), and not sense-illusion (Schein). On the other hand, let me attribute the redness to the rose in itself, the "handles" (as existent fact) to Saturn, or extension to all outer objects in themselves, without consideration of the particular relation of the object to the subject in each of these cases, and without accordant limitation of my judgment—then I have involved myself in, or given rise to, illusion.—K.

The *ring* of Saturn, when first seen by Galileo, looked like "two handles." This was in 1612. In 1655, again, Huyghens explained the "handles" by reference to the ring. And in 1715 Cassini discovered that the ring was double. Since 1850 a third ring has been added, and what is now talked of is Saturn's "series" or "system" of rings.

thing actually inherent in substances, were yet something existent, nay, the necessary conditions of the existence of all things; and which would continue to exist were all other things put an end to. We have only to reflect on the absurdities in which this supposition would involve us, to find it very pardonable on the part of the good Berkeley that he reduced all things into a mere illusion. Why, even our own existence, were it conceived dependent in such fashion on the self-subsistent reality of a nonentity like time, would, with time itself, be necessarily transformed into a mere show,—an absurdity for which no man as yet has made himself responsible.

IV. In natural theology where what is thought is not only for us no object of perception, but never can be even to its own self an object of *sensuous* perception, we are careful to remove the conditions of time and space from all perception on the part of such object (for cognition in such a case must be perception, and not thought, which always shows limits). But with what right should we do this, if we have first of all assumed both time and space as forms of things in themselves, and such as would continue to be *a priori* conditions of things, even if these things themselves were once for all annihilated; for, as conditions of existence as a whole, they must necessarily be conditions of the existence of God? But if we are not to make them objective forms of all things, then there is nothing left us but to make them subjective forms of our own mode of perception, whether outer or inner — a mode of perception, further, which is to be recognised as sensuous for the reason that it is not *original*. An original perception, namely, is such that through it the very being of its object is given; and this is a perception which, so

far as we see, can only belong to God. A sense-perception, such as ours, on the contrary, is dependent on, and subservient to, the object, and is consequently only possible by this, that the perceptivity of the subject is by said object affected.

It is not necessary, either, that we should confine a perception in space and time to the sensibility of man. It may be that all finite thinking beings must, in that respect, necessarily be identical with us (though we cannot decide as much); but it would not follow, from this universality, that such a mode of perception were not still sense. It would still be a derivative perception (*intuitus derivativus*), and not original (*intuitus originarius*). That is, it would not be an intellectual perception, such as, for the reason alleged, appears to belong to God only, and never to a being that is dependent as well in its existence as in its perception (which is determinative of its existent states in regard to given objects). But this latter remark is only in place here in our æsthetic theory as an illustration, and must not be accounted a ground of proof.

Conclusion of the Transcendental Æsthetic.

In resolution of the general problem of our transcendental philosophy (How are synthetic propositions *a priori* possible?), we now possess here one of the required resources. We have now, namely, pure *a priori* perception, as such resource, the forms of which are space and time. In these, when, in an *a priori* judgment, we would go beyond a given notion, we have the means of finding what can be *a priori* discovered (not, indeed, in the notion, but very certainly in the perception correspondent to it),

and may be synthetically united with it (the notion). That, however, amounts to certain judgments; which judgments can, at the same time, never extend further than to objects of the senses, nor possess validity for any others than those of possible experience.

Transcendental Logic.

I. Of Logic in General.

Our cognition has, on the part of the mind, two sources. Of these the first is the receptivity of impressions, and the second the spontaneity of notions. Or the first receives the crude appearances of sense, and the second works them up into the finished perception of an object. An object, consequently, is by the first *given*, but by the second *thought*—thought, that is, in relation to the sense-impression, the sense-appearance, which, for its part, and solely as such, is merely affection of the sensory. Crude sense-perception and notions, therefore, constitute the elements of all our perfected perception, or perception as ordinarily understood. Neither notions without sense-elements in some way correspondent to them, nor sense-elements without notions, are capable of furnishing a finished perception. Both, again, are either pure, or else empirical—*empirical*, when involving special sensation (which presupposes the actual presence of an object); and *pure*, when, in the intimation to consciousness, there is no admixture whatever of any element of sensation as such. This element, indeed, sensation as such, may be named the *matter* of sense-cognition. Pure perception, again (that is, *perception*

as perception properly and strictly so called, and *pure* as being yet free from either sensation or notion), is tantamount to the *form* (space and time) under which the perception of anything actual can, in general, take place; while pure notions, for their part, constitute the *form* (rather forms) under which an object in general must be thought—in order to be perceived, namely. Pure perceptions or pure notions are alone possible *a priori;* empirical ones only *a posteriori.*

If we name the *susceptivity* of mind to *receive* elements, so far as it is in some certain way affected, *sensibility*, then the power, on the other hand, to *produce* elements, or the *spontaneity* of notions (towards perception, namely), is the *understanding.*[1] Our constitution is such that what we distinctively mean by perception as an element or form, must always be of the nature of sense (though not necessarily a special sensation); that is, perception, as perception proper, applies to the manner in which (sensation as sensation conceived apart) we are affected by objects. On the other hand, the faculty that, to the sense-perceptive elements in the case of an object, adds the required thought-perceptive elements, is the understanding. Neither of these elements is to be preferred to the other. Without sensibility there were no object perceptively given, and without understanding there were no object perceptively thought. Thoughts,

[1] Kant's language here will never be understood, if to such words as *notion*, *cognition*, *spontaneity*, *understanding*, etc., there be given no reference but the usual intellectual one of thought proper as opposed to sense. They must all of them take on, in addition, a direction to perception. Pure perception is time and space. Crude perception is these inspissated, by special sensations, into *Erscheinungen*, which are objects, but as yet without the foci of the categories. Complete or finished perception, lastly, is, by addition of action from the categories, the ordinary perception of experience proper.

without a content of perception, are void; perceptions, without the focus of notions, are blind. It is just as necessary, consequently, to add perceptions to one's notions, as to add notions to one's (crude) perceptions. Neither faculty can exchange functions with the other. The understanding does not *perceive;* nor the senses think. Only in their union is there what cognition we name finished or perfected objective perception, the perception of *experience.* But we must not on that account confound their shares in the resultant act; on the contrary, we must carefully separate and distinguish them. Accordingly, we expressly distinguish the Science of the Rules of the Sensibility as such (Æsthetic), from the Science of the Rules of the Understanding (Logic).

Now logic, again, can be understood in two ways: either as logic general, or as logic special, and in both cases, of course, with reference to the employment of the understanding. The former will contain the absolutely necessary rules of thought, or those rules without which there can simply be no employment of the understanding at all; it relates to the understanding without respect of the different objects to which it may be directed. The latter will apply to the rules rightly to think some certain class of objects. We may name the one elemental logic, the other an organon of this or that particular science. The latter is frequently premised in the schools as propædeutic of the sciences, although it is what is reached latest in the progress of reason—reached, indeed, only when the science itself has long been ended, and requires only the last touch for its due adjustment and final completion. For objects must themselves be understood in a pretty high degree, if we are to assign the rules by which a science of them is to be realized.

As for general logic, it is either pure or applied. In the former we abstract from all empirical conditions under which our understanding is exercised. We abstract in it, for example, from the influence of the senses, the sport of fancy, the laws of memory, the power of habit, inclination, etc. We abstract, consequently, also, in it, from the sources of prejudice, nay, in general, from all causes whence special cognitions arise to us or are interpolated, inasmuch as they merely concern the understanding under special circumstances of its application, and to know these experience is required. A general but pure logic has to do, therefore, with mere principles *a priori*, and is a *canon* of the understanding and reason, but only as regards the *formal* element in their use, the *matter*, on its part, again, being what it may (empirical or transcendental). A general logic, on the other hand, is then called *applied* when it is directed to the rules of the exercise of understanding under the empirical subjective conditions which are taught us by psychology. This logic, therefore, is possessed of empirical principles, although it is in so far general as it concerns the exercise of understanding without distinction of objects. It is for this reason also that this logic is neither a *canon* of the understanding generally, nor an *organon* of special sciences, but solely a *catharticon* of the common or ordinary understanding.

In general logic, there must be an entire separation between the pure and the applied parts. The former part alone is properly science, though brief and dry, and such as an academical statement requires on the part of an elemental logic. Here, therefore, logicians must have always two rules in their eye.

1. As *general* logic, it abstracts from all diversity of objects in cognition, and from these themselves;

it has to do with nothing but the mere form in thinking.

2. As *pure*, it has no empirical principles, and, consequently, does not (as has been sometimes supposed) take anything from psychology, which, in reality, has no influence upon a canon of the understanding. It is a demonstrated doctrine, and everything in it must be quite *a priori* certain.

What (contrary to the common use of the word, which relates to certain *exercitia* on the rules of pure logic) I name *applied* logic, is an exposition of the understanding and of the rules of its necessary exercise *in concreto*, namely, under the contingent conditions of the subject, which, as such, may either obstruct or promote said exercise, and which collectively can only empirically be given. It treats of attention, its obstacles and advantages, the sources of error, the state of doubt, hesitation, persuasion, etc. Pure general logic bears the same relation to it, therefore, that a pure ethic (which contains only the necessary moral laws of free-will as such) bears to the special doctrine of offices, which treats of those laws as under the hindrances of the feelings, desires, and passions, to which mankind are more or less prone. Such doctrine evidently resembles the applied logic, as standing in need, like it, of empirical and psychological principles, and is consequently inadequate to a true and demonstrated science.

II. Of Transcendental Logic.

General logic abstracts, as we have shown, wholly from the matter of cognition, that is, from any reference of cognition to an object of it; and regards alone the logical form in the relation of the cognitions

the one to the other, or the form of thought quite generally. Inasmuch, now, as there are (according to the transcendental æsthetic) as well pure as empirical perceptions, it is possible that a like difference may be found between the pure and the empirical *thinking* of objects. In that case we should have the possibility of a logic in which abstraction from all matter of cognition would not be necessary. For there might be a logic, excluding, indeed, empirical matter, but admitting all that could be *a priori* cognised (through perceptions or notions) in reference to objects even as experienced in actual fact. Such logic would relate, consequently, to the origin of our actual perception and other cognition of objects of experience, so far as that origin did not, or could not, lie in these objects themselves. It is otherwise, of course, with *general* logic, which, for its part, has nothing to do with any such origin of the actual perception and cognition of objects. On the contrary, it considers only the laws followed by the understanding in its process of thought as concerns objects in their mutual relations generally, without distinction either of these objects themselves or of their origin, whether *a priori* or empirical. General logic, indeed, treats only of what forms of the understanding ideas must accept, let them originate or be as they may.

And here I place a remark which, as influencing all our subsequent proceedings, must be carefully kept in view. The designation transcendental, namely (which means the possibility of such perceptive *a priori* knowledge, and the rationale of its application in actual fact), is not to be extended to every *a priori* element, but only to those which enable us to recognise the fact *that*, and the mode *how*, certain states of consciousness (perceptions or notions) are wholly and

solely of *a priori* possibility and of *a priori* action. Hence we must neither call space, nor any *a priori* determination of space, as in forms of geometry, transcendental. What alone is transcendental is, as well the perception that these things (space, etc.) are not of empirical origin, as also the possibility that and how, nevertheless, they may even *a priori* conjoin themselves to actual objects of experience.[1] In like manner, the relation of space to objects *generally* is transcendental; but, restricted (with reference to the result) to objects of the senses, it is empirical. The distinction, therefore, between what is transcendental and what empirical has place only in the critique of the cognitions, and does not concern the conjunction of these with their objects.

In the expectation, then, that there are possibly notions, *a priori* entrant into objects, not in the manner of perceptions, indeed, whether pure or sensible, but merely as pure thought-functions — notions, consequently, which are in origin neither empirical nor æsthetic—we prefigure the idea of a science of pure cognition which, though exclusively holding of understanding and reason, will enable us to think facts of actual experience even wholly *a priori.* A science, determinative of the origin, limits, and objective actuality of such cognitions, would necessarily take the name of *Transcendental Logic.* It would have to do, namely, only with the laws of understanding and reason, and this expressly in an *objective* application *a priori;* and not indifferently, like general logic, in reference to interests whether empirical or pure.

[1] In the above sentence the word "könne" should evidently be in the plural. Otherwise the only possible nominative to this verb would be "Erkenntniss," which makes tautological nonsense of the sentence, analyze it grammatically as one may.

III. Of the Division of General Logic into Analytic and Dialectic.

The old and well-known question, with which logicians were supposed to be put to straits and compelled either to have recourse to a miserable dialexis[1] or to admit their ignorance and, consequently, the nullity of their entire business, is this, What is truth? The nominal definition of truth, that it is the agreement of cognition with its object, is here admitted and presupposed. But the question we suppose really to be asked, is, What is the universal and certain criterion of the truth of all and every cognition?

It is already no small but an indispensable proof of sagacity and penetration to know what it were rationally proper to ask. For, the question itself being absurd and only calculated to elicit useless answers, it has, besides shaming the questioner, sometimes the further disadvantage of misleading the unwary hearer into absurd replies, and suggesting the ludicrous spectacle of one man (as the ancients said) milking the he-goat, while the other holds up a sieve.

If truth consists in the agreement of a cognition with its object, then this object must be thereby distinguished from others; for a cognition is false, if disagreeing with its object, though possessing something that may well be true of other objects. Now, a universal criterion of truth would be such as holds good of all cognitions, without distinction of their objects. It is plain, however, that, as, in the case of such a criterion, there is abstraction from every matter of cognition (reference to its object), and truth precisely concerns this matter, it is quite im-

[1] Rosenkranz has "Dialele" instead of *Dialexe*.

possible and absurd to ask still after a criterion of the truth of this matter of the cognitions; and that, therefore, it is impossible also to assign any adequate criterion of truth that shall at the same time be universal. What is to be said here, then, is, that of the truth of cognition as regards matter there is no universal criterion to be required, for any such were a contradiction in itself.

But it is equally plain, as regards cognition in mere form (all matter apart), that a logic, confined to the universal and necessary rules of the understanding, must furnish, just in these rules, criteria of the truth. For whatever contradicts these is false, inasmuch as the understanding would then contradict its own universal rules of thought, and consequently its own self. These criteria, however, concern only the form of truth or of thought generally, and are so far quite correct, but not all-sufficient. For though a cognition were in full agreement with the logical form, and consequently did not contradict itself, it might still, nevertheless, contradict the object. The merely logical criterion of truth, therefore, agreement of a cognition, namely, with the universal and formal laws of the understanding and reason, is certainly the *conditio sine qua non* or the negative condition of all truth. Further, however, logic cannot go; and the error which concerns, not the form, but the matter, is not to be detected by any touchstone of logic.

Now, general logic resolves the whole formal business of understanding and reason into its elements, and exhibits these as the principles of all logical judgment in cognition. This part of logic may be called an *Analytic*, therefore, and is, at least, the negative touchstone of truth; for by these rules must, first of

all, every cognition, in form, be gauged and tried, before looking to its matter in order to determine whether, with reference to the object, it possesses positive truth. But the mere form of cognition, however much it may agree with logical laws, falls still far short of constituting, as such, material or objective truth. In respect of objects, no one with mere logic can venture to pronounce, or maintain anything; but, having first of all thoroughly inquired into them, logic apart, only afterwards one merely tries the using and connecting of them in a coherent whole on logical laws, or, better still, submits them solely to the test of these. Nevertheless, however poorly off, or quite void, we may be as regards matter, the possession of such plausible art to bestow on all our cognitions the form of the understanding proves so seductive that said general logic, though a simple canon in judging, has, at least for the mere blind show of objective affirmations, been used, or, in effect, misused, as an organon of actual production. Now, general logic, as such supposititious organon, is what we name *Dialectic*.

However variously in meaning the ancients applied this appellation of a science or art, we can always confidently gather from their actual use of it that they intended by it only *the logic of* (*false*) *show*. A sophistical art to give ignorance, nay, intentional trickery, the colour of truth, it imitated the rigour of logic, and applied its topic in concealment of all manner of empty pretexts. Now, we may regard as a safe and serviceable warning the fact that general logic, when used as an organon, is always dialectical, or a logic of show. For, as it tells us nothing of the matter of cognition, but only the formal conditions of agreement with the understanding, which, of course,

in respect of objects, are quite indifferent, we must regard the idea of using it as a means (organon) of extending and enlarging, at least in pretension, our knowledge—we must regard this as eventuating in nothing but an empty verbiage of affirming, or at will denying, with some show of truth, whatever we please.

Such teaching as this is altogether beneath the dignity of philosophy. For this reason dialectic has been included in logic rather as a critique of dialectical show, and it is as such we would have it understood here.

IV. Of the Division of Transcendental Logic into the Transcendental Analytic and Dialectic.

In a transcendental logic, we isolate the understanding, as already, in the æsthetic, sense, and make prominent merely the share of thought in our perceptive experience, which is alone derived thence. The necessary condition for action of such principles is, that objects be given us in sense-perception, to which then they may be applied. For without such perception, experience, as wanting objects, remains altogether void. That part of transcendental logic, therefore, which propounds the elements of pure understanding in experience, and the principles without which no object can anywhere be thought into perception, is the *transcendental analytic*, and at the same time a logic of truth. For no cognition in experience can contradict it, without losing at the same time all its matter, that is, all its conjunction into an object, and consequently its truth. It is, however, very tempting and misleading to make use of these pure principles by themselves, and even beyond the limits of experience, which can alone furnish the matter or objects whereon to apply them.

In this way, consequently, understanding runs risk of making, through mere cobwebs of reason, a *material* use of its own simply *formal* principles, and without discrimination judging of objects which are neither given us, nor in any way, perhaps, *can* be given us. Specially calculated to yield only a canon of judgment in experience, they are merely misused, when, applying them universally and without restriction, we venture, in respect of objects generally, with pure understanding alone, *synthetically* to judge, pronounce, and decide. Such use of pure understanding were *dialectical.* The second part of transcendental logic, therefore, must consist of a critique of this dialectical show, and be named *Transcendental Dialectic.* We are not to expect in it, however, an art dogmatically to produce such show, which, alas! is a very current art of manifold metaphysical juggleries. Quite on the contrary, it shall be a critique of understanding and reason in their hyperphysical use, in order to detect the false show of their groundless pretensions. Their supposed claims, therefore, to discovery and extension through mere transcendental principles, it will be the business of this critique to reduce to a simple estimate of the pure understanding and the preservation of it from sophistical deceits.

Transcendental Analytic.

This analytic is the resolution into its elements of what *a priori* cognition in experience holds of the understanding. And here the following points require to be looked to:—1. The constituent notions must

be pure, and not empirical. 2. They must belong, not to perception proper and sense, but to thought and understanding. 3. They must be elementary and primitive, not compound or derivative. 4. Their table must be complete, so that they shall cover the entire field of pure understanding. But now this completeness, as of a single science, cannot be expected from any mere rough calculation of some aggregate that owes its existence to a venture. It is only possible through the *idea*, rather, of a *whole* of the *a priori* of experience that belongs to the understanding, and a whole, too, duly *distributed* into its constituent notions; or, what is the same thing, it is only possible through the connexion of these notions in a *system*. Pure understanding, then, is, as such, neither empirical nor sensuous. Separated thus, it constitutes a self-subsistent and self-complete unity, that is not to be supplemented or improved by any addition from without. The sum of its elements will constitute a system to be comprehended and determined under a single idea, and so that its completeness and articulation shall furnish, at the same time, a touchstone of the purity and truth of every article of cognition that is to be fitted and united into it. This part of transcendental logic will consist of two books, the one appropriated to the *notions* of pure understanding, as the other to its *judgments*.

Book I.—The Analytic of Notions.

I understand by analytic of notions not the analysis of these, or the usual resort in philosophical inquiries to the resolution and explication of occurrent ideas,

but, what hitherto has been little attempted, the resolution of the faculty itself, in order to discover the possibility of *a priori* notions, and in this way, that we look for them in the understanding alone as their place of birth, whose pure function we analyze as such. That is what operation is peculiar to a transcendental philosophy; what is usual else is but the logical discussion of notions in philosophy generally. We shall pursue, therefore, pure notions into their first germs and principles in understanding; in which germs and principles we are to suppose they lie ready waiting, till, at length developed by occasion of experience, and by the same understanding freed from adherent empirical conditions, they stand forward in their perfection.

Chapter I.—Of a Clew to all Pure Notions of the Understanding.

When we set a faculty into action, conformably to the various occasions various notions appear, which express the faculty, and may be collected in a more or less completed sum, according as the attendant observation has been longer or shorter, closer or slacker. Where, in such, so to speak, mechanical proceeding, any such inquest is to be regarded as complete, is never with certainty determined. Neither do the notions, thus only casually discovered, unravel themselves in any order or systematic unity, but are at last only sorted according to likeness, and, from the simpler to the more complex, ranged according to contents in series which are nothing less than systematic, though brought about by method of a sort.

Transcendental philosophy has the advantage, but the obligation too, to find its notions in conformity

with a principle, for this reason, that they must issue from the understanding in its absolute unity, pure and unadulterated; and so must cohere among themselves under a one notion or idea. But such systematic articulation offers a rule, in accordance with which there may be *a priori* assigned to every pure notion its place and to all together their rounded completeness; and all this would, any other wise, be a matter of chance, or of one's own arbitrary choice.

Section 1. Of Understanding in its Logical Function Generally.

The understanding has been already merely negatively described as a non-sensuous intellectual faculty. Now, apart from sense, we are insusceptible of any perception proper. The understanding, consequently, is no faculty of perception proper. But, perception apart, there is no cognition but that through notions. Cognition of all, more especially human, understanding, is, as through notions, not intuitive, but discursive. All perceptions, as of sense, rest on affections; notions, therefore, on functions. But by function I understand that unity of act whereby the various units in a cognition are ordered into a single common one. Notions found, therefore, on the spontaneity (self-action) of thought; as sense-perceptions on the receptivity of impressions. Notions, now, can be used by understanding only in so far as it *judges* by them. But no cognition referring directly to its object unless perception, a notion will be necessarily referred to its object only mediately, that is, through some other intimation of it (whether perception or notion). *Judgment*, therefore, is the mediate cognition of an object, and consequently the cognition of a cognition of it. In every judgment there is a notion which, compre-

hending several, is applied to a given one; and this latter is directly referred then to the object. Thus in the judgment, All bodies are divisible, the notion of divisibility, as referable to several others, is specially applied to one among these, body; and that, again, to certain actual objects of sense. These objects, therefore, are only mediately cognised through the notion of divisibility. All judgments are, accordingly, functions of unity to the variety in a cognition: in the cognition of an object, namely, there is employed in judgment, not an immediate element (of consciousness), but a higher one comprehending immediate elements under it; and in this manner several possible units of cognition are combined into a single one. But all acts of understanding may be reduced to judgments, and understanding itself, therefore, may be defined a *faculty to judge*. For, as above shown, it is a faculty to think. Then to think is to cognise through notions. And notions, again, as predicates of possible judgments, conjoin themselves into the conception or perception of some (till then) indefinite object. Thus the notion body refers to something, which something (a metal, say) can be cognised through said notion. Body, then, is only a notion by this, that other elements of cognition are contained under it, through which it gets referred into actual objects. Or it is a predicate to a possible judgment, as that every metal is a body. The functions of the understanding, accordingly, will be capable of being exhaustively discovered, if we can but exhaustively enumerate the functions of unity in judgments. But that this is very easy of accomplishment, the following section will show.

Section 2 (§ 9). Of the Logical Function of Understanding in Judging.

If we abstract from all matter of a judgment, and consider only the precise form of the understanding that is manifested in it, we readily find that the functions of thought, in any such, may be reduced to four *titles*, with three *moments* under each. This may, not inaptly, be exhibited in the following table:—

1. Quantity of Judgments: Universal, Particular, Singular.
2. Quality: Affirmative, Negative, Infinite.
3. Relation: Categorical, Hypothetical, Disjunctive.
4. Modality: Problematic, Assertoric, Apodictic.

Inasmuch, now, as this classification seems, in some, though inessential, particulars, to differ from the usual one in technical logic, the following premonitory explanations, as against possible misunderstanding, may prove not unnecessary.

1. Logicians say rightly that, in a syllogism, the singular proposition may be regarded as a universal one. For just because singulars have no extension, is it impossible that the predicate in such should be partly affirmed and partly denied of the correspondent subject. The former holds good of the latter, therefore, without exception, just as though this latter were a universal notion to which, in the entire import of its extension, the predicate applied. On the other hand, again, should we compare a singular with a universal proposition merely as a cognition and in regard of its magnitude, then the former stands to the latter as unity to infinitude, and in itself, consequently, essentially differs from it. When I consider,

therefore, a singular proposition, not merely in its inner validity, but also, as simply a cognition, in the magnitude which it possesses as compared with others, then certainly it is different from universal propositions, and deserves a place of its own in a complete table of the moments of thought as such (though not, naturally, in a logic that is merely addressed to the functions of judgments in their mutual relations).

2. Just in the same way, infinite propositions must, in a transcendental logic, be distinguished from affirmative ones, though, in general logic, they are rightly reckoned with these, and constitute no special member of distribution. General logic, namely, abstracts from all matter of the predicate (though merely negative), and considers only whether it is attributed to the subject or opposed to it. Transcendental logic, again, considers the judgment in the value or matter of logical affirmation even through a negative predicate, and what gain such affirmation procures cognition as a whole. Suppose I had said of the soul, it is not mortal, I should, by means of a negative judgment, have at least warded off error. But now, logically, I have here really affirmed, seeing that I have placed the soul in the unrestricted sphere of the non-mortal beings. As now, of the whole sphere of possible beings, the mortal occupy one part, and the immortal the other, there is nothing else said in my proposition than that the soul is one of the infinite number of things which still persist when I suppress the mortal. But here the infinite sphere of relative possibility is limited only in so far as what is mortal is removed from it, and the soul placed in the remaining amount of its extension. This amount remains, however, after this removal, still infinite; and it is still possible to remove other parts of it, without the notion of the

soul being thereby in the least increased and affirmatively determined. These infinite judgments in regard of the logical extension, therefore, are really merely limitative in regard of the matter (comprehension) of cognition; and must, so far, not be neglected in a transcendental table of all moments of thought in judgments, inasmuch as the function of understanding here in play may, possibly, be of importance in the field of its pure *a priori* cognition.

3. All the relations of thought in judgments are these: *a*, of the predicate to the subject; *b*, of the antecedent to the consequent; *c*, of a disjunctive cognition and its members mutually. Of these, there are considered, in the first, two notions, in the second, two judgments, and in the third, several judgments relatively the one to the other. The hypothetical proposition, If perfect justice exists, the hardened criminal will be punished, involves properly the relation of two propositions, namely, that perfect justice exists, and that the hardened criminal gets punished. Whether both of these propositions be in themselves true, remains undetermined. What is thought in such a form of judgment is alone the consequence (between the members of it, not the truth of these). Finally the disjunctive judgment considers also a relation of two or more propositions mutually—not that of the consequence, however, but that, rather, of logical contraposition. That is, it considers such propositions so far as the sphere of the one excludes the sphere of the other, and yet so that both, or all together, constitute in common the whole sphere of the special cognition in question. The relation in point, therefore, is one that concerns the parts of the sphere of a cognition, where the sphere of the one part is (towards the whole) complementary of the

other or others. We say, for example, The world exists either through blind chance, or internal necessity, or an external cause. Now, here, each of these propositions represents a part, and all together the whole, of the sphere of all possible cognition in reference to the existence of the world. To exclude the truth from any one of these spheres is to place it in one of the others; while to place it in any one of these latter is to exclude it from all the rest. There is, therefore, in a disjunctive judgment a certain community of the terms of the cognition involved. This community consists in the fact that said terms reciprocally exclude each other, at the same time that they determine the truth as a whole, inasmuch as collectively they constitute the entire import of the single given position. And this is what, merely for the sake of the sequel, I find it necessary to remark here.

4. Modality in judgments is quite a special function of these. What distinguishes it is, that it contributes nothing to the matter of the judgment (for besides quantity, quality, and relation, there are no other constituents of the matter of a judgment), but only concerns the value of the copula in relation to thought as such. Problematic judgments are those where we assume the affirmation or negation as merely possible (we may take either as we please). Assertoric are those where we consider the one or the other alternative as actual (true). Apodictic, lastly, are those where the alternative is regarded as necessary.[1] Thus the antecedent and consequent of an hypothetical judgment, as well as the members of a disjunctive one, are all problematic. In the above

[1] Just as though, in the first case, thought were a function of the understanding; in the second, of judgment; and in the third, of reason: a remark which remains to be explained in the sequel.—K.

example, the proposition, A perfect justice exists, is not assertorically spoken, but only thought as a discretionary judgment, which it is only possible that some one may adopt: only the consequence is assertoric. Hence such judgments may be manifestly false, and yet constitute, when problematically taken, conditions of knowledge of the truth. In the same way, in the disjunctive judgment, the proposition, The world exists through blind chance, is only of a problematic value. It is possible, namely, that it should be only temporarily assumed; and yet, in its place, it serves for discovery of the truth (just like indication of the wrong way among those possible). The problematic proposition, therefore, is such as expresses only logical (not objective) possibility; and this possibility amounts only to a free choice in the admission of such a proposition, or to a merely discretionary assumption of it into the understanding. The assertoric proposition expresses only logical actuality or truth. Thus, for example, in an hypothetical syllogism, the antecedent, while problematical in the major, is assertoric in the minor. In such proposition it is seen, however, that it is united to the understanding according to its laws. The apodictic proposition thinks an assertoric one as determined by these very laws of the understanding itself, and as *a priori*, therefore, in the assertion it makes; it expresses in this way logical necessity. Here, now, inasmuch as all is incorporated into the understanding in grades—as of something first judged problematic, then assertorically assumed true, and finally affirmed to be inseparably united with the understanding, or apodictically necessary—we may evidently name these three functions of modality quite as well so many moments of thought as such.

Section 3 (§ 10). Of the Pure Notions of the Understanding (the Categories).

General logic, as frequently said already, abstracts from all matter of knowledge, and looks for perceptions to be given to it from elsewhere, in order to convert these into notions; and this process proceeds analytically. Transcendental logic, on the other hand, already has the matter offered it by the transcendental æsthetic (the composites, namely, of time and space in *a priori* sensibility), as a material for the notions *a priori* in understanding; and without it, plainly, these would be devoid of all contents and, consequently, altogether blank.[1] Or space and time, as conditions of our receptivity, under which alone objects can be received by us (and which conditions, therefore, necessarily affect the notion of an object), possess in themselves a complex or composite of pure *a priori* perception (or pure *a priori* objectivity). But the native energy (spontaneity) of our thought demands that this *a priori* perceptive or objective matter (laid into imagination) should, first of all, be run over, taken up, and conjoined, in order that a cognition (or, so far, a perception) should be made of it. This process (of imagination), now, I term synthesis.

By synthesis, in its most general sense, I understand the uniting of the various units in a consciousness the one to the other, and the combining of their complex into a single cognition (perception). Such synthesis is pure when the materials in it are furnished for it, not empirically, but *a priori* (as those

[1] To refer the "sie" (as an *it*) to "transcendental logic" makes a poor sense. This "sie," then, is better referred to the "notions." The "würde" of the text, consequently, is an error for *würden*.

that are furnished by time and space). Before all analysis of any of our cognitions these cognitions must, first of all, evidently, be given; and no notions, so far as matter (not form) is concerned, can *analytically* originate. It is synthesis (let its matter be empirical or *a priori*) which first makes a cognition (perception) of that matter. Said cognition or perception may, of course, in the first instance, be crude and confused, and require analysis; but it is the synthesis which specially collects the units (towards perceptions), and unites them all into a single substantiality or object. Synthesis, therefore, is what first claims our attention, when we would inquire into the origin and nature of our cognition of objects.

Synthesis as such (this is made clearer again) is the mere act of imagination, a blind, but indispensable, function of the soul, of which, indeed, we are seldom ever once conscious, but without which we should have no cognition at all. But again, now, to bring this first synthesis of imagination under the action of notions, that is a function of *understanding;* and thereby, first of all, is there realized for us the cognition (perception) of experience, in its proper signification.

Pure synthesis, quite generally conceived, is to be further understood as implied in, or exemplified by, each of the pure or *a priori* notions of the understanding.[1] I understand by this (pure) synthesis, a syn-

[1] The original runs, "*Pure synthesis, generally conceived*, gives now the pure notion of understanding." The meaning, even in this way, is not too oblique to be understood, if for "gives" we say *constitutes*, which really is the force of the German. It is quite possible, however, that the "den" should be *der*, which would reverse the positions of subject and object, but only place them as, evidently, they naturally should be placed. It is so I have translated the sentence, substituting also the

thesis that rests on a ground of synthetic unity *a priori*. Thus our system of arithmetic (as observable more especially in larger numbers) is a *synthesis on notions*, because it depends on a common ground of unity (*e.g.*, the decade). But in such a case, the unity in the synthesis of the constituent complex is necessary.

Analytically, a variety of objects are brought under a single common notion; and this is a business which belongs to general logic. But not to bring objects, rather only the pure or *a priori* synthesis implied in objects, under the scope of notions—this is a process that is treated by transcendental logic. The first element that must be given for the *a priori* cognition of objects is the multiple or complex of pure perception (pure objectivity—time and space). The second is the synthesis of this complex on the part of imagination; and so far there is not yet a cognition. The third element towards perception of an object on presentation of itself is constituted by the notions which introduce further unity and unities into this pure synthesis, and which consist, indeed, solely in the consciousness of this synthetic unity, or these synthetic unities: these notions belong to the understanding.

The same functions which variously give unity to

actual plurals which the generalizing singular is really meant to represent. In short, what is to be understood here is this. A category, as a notion, implies a meaning; and that is a unity of some certain complex or multiple (of relation, say). A multiple so placed or suspended in such a unity may be called a synthesis. And this synthesis, as held by one of the *a priori* notions (or categories) in the system of such, may very intelligibly be spoken of as "*pure synthesis, quite generally conceived.*" Each category is such. Or each category is a unity, but a unity necessarily of *something*. That is, each category, in the system of such (and that system is tantamount to the system of functions which constitute self-consciousness), as a concrete, is the intellectual unity of an intellectual multiple. (It is true, too, that pure synthesis purely cognised just *is* the pure notion: *der* for "den" involves *reine* for "reinen").

the several terms in judgments, extend a various unity also to the mere syntheses of the different units in perceptions. These latter unities, or sources of unity, are the *a priori* notions of the understanding (the categories). The same functions of understanding, therefore, which, by means of the analytic unity, brought about the logical form of a judgment in notions, do also, by means of the synthetic unity (which they likewise involve), bring about a transcendental objectivity (of union) in the complexions of perception. These functions, in this latter application, may, consequently, be intelligibly named pure notions of the understanding (categories): they have, intelligibly also, said *a priori* action on objects; and that, plainly, is not an affair of general logic.[1]

Now, just in this way we may conceive to arise exactly as many pure notions of understanding (with necessary *a priori* action on the objects of perception) as there are logical functions of all possible judgments in the preceding table. For, through said functions, the understanding as understanding is completely exhausted, and its powers as a faculty duly gauged. We call these notions categories, as following Aristotle, seeing that our intention with them is originally the same as his, however widely different it will be found in the carrying of it out.

Table of the Categories.

1. Quantity: Unity, Plurality, Totality.
2. Quality: Reality, Negation, Limitation.

[1] This is one of Kant's very worst paragraphs, and I have been obliged considerably to help it. I shall be found elsewhere to agree with Rosenkranz as to the style of Kant, and to defend it against De Quincey. Nevertheless, it is to be admitted in the end that no author writes more contentedly than Kant what simply comes first to hand. Hence his many confused, over-clausedand cross-clausedsentences.

3. Relation: Inherence and Subsistence (Substance and Accident), Causality and Dependence (Cause and Effect), Communion (Reciprocity of Action and Passion).
4. Modality: Possibility—Impossibility, Existence (Actuality)—Non-existence, Necessity—Contingency.

This, now, is the catalogue of all the primitive pure notions of synthesis which understanding *a priori* possesses, and only by reason of which, too, it is a pure understanding, seeing that it is by them alone that it can understand something on occasion of a complex of perception, that is, think an object of perception (or, simply, perceive). The classification is systematically constructed in obedience to a common principle, namely, the faculty to judge (which just means the faculty to think). It is no product, therefore, merely rhapsodical, of a search after pure ideas on chance, the completeness of which then can never be relied on; for, being realized only by induction, it is impossible to understand in that way how precisely these and not other notions should constitute a pure understanding. To ask after such primitive notions was, on the part of Aristotle, an idea worthy of an acute-minded man. As he had no guiding principle, however, he could only pick them up as they came in his way. In this manner he got together at first ten of them, and these he called categories (predicaments). In the end, however, he believed himself to have discovered other five, which were consequently named post-predicaments. Nevertheless his table still remained defective and incomplete. Thus some of its articles (*quando*, *ubi*, *situs*, *prius*, *simul*) are *modi* of sense, as another (*motus*) is empirical, and

these ought to have no place in a genealogical tree of pure understanding. Others, again, are mere derivatives (*actio*, *passio*), while of the primitives themselves there are several wanting.

In the last reference, it is to be remarked that the categories, as the true root-notions of pure understanding, have their equally pure derivative notions which, in a complete system of transcendental philosophy, cannot by any means be omitted. At present, however, in a mere critical preliminary inquiry, I may content myself with only mentioning them.

Let me beg leave to call these pure but derivative notions the Predicables of pure understanding (as in contrast to the predicaments). Once we have the original and primitive notions, the derivative and subordinate ones may be readily added, with the result of completely depicting the whole tree of the pure understanding. As I have to do here, however, not with the completion of the system, but only with the principles towards it, I reserve this for the business of another work. Still as much as this may be pretty well attained, if, with guidance of the ontological text-books, we range under the category of causality the predicables of force, action, passion; under that of reciprocity, those of presence, resistance; under that of modality, those of origin, decease, alteration, etc. The categories being combined with each other, or with the *modi* of pure sense, furnish a large number of *a priori* derivative notions. To note these, and, if possible, fully specify them, would be a profitable and pleasant task, but one that may be dispensed with here.

I intentionally omit the definitions of these latter (derivative) categories in the present work, though, possibly, in possession of them; and I shall not con-

sider these notions themselves, in the sequel, any further than may be necessary for my theory of method. In a *system* of pure reason, they would rightly enough be required from me; but here they would only cause us to lose sight of the chief interest in question, by suggesting doubts and provoking attacks which, without any loss, we might very well reserve for consideration elsewhere. It is clear enough, just from the little I have said, however, that a complete relative vocabulary, with all needful explanations, were not only possible, but even easy to effect. The lines are once for all there; it is only necessary to fill them up; and a systematic *topic* like this does not easily allow us either to mistake *loci* or to overlook those that are still empty.

§ 11.

In regard to this table of the categories some nice remarks suggest themselves, which may not be without an important bearing on the scientific form of all general interests of reason. For that, in the theoretical part of philosophy, this table is uncommonly serviceable, nay, indispensable, in assisting us completely to lay out the plan to the whole of a science, so far as it rests on *a priori* notions, and mathematically distribute it on *fixed principles*, is already evident of itself. Said table, namely, contains, in completeness, all the elementary notions of the understanding, nay, even the form of a system of such in the human mind, and directs us, consequently, to all the *moments* of any projected speculative science, not omitting its very *order;* and of this I have given an example elsewhere (*Metaph. Prins. of Nat. Phil.*) Here, now, are a few of these remarks.

1. The four classes in our table may be thrown into two divisions: one directed to objects of perception (no matter whether pure or empirical), and the other to the existence of these objects (so far as they are referred to the understanding, or the one to the other).

I would call the classes in the first division *mathematical*, and those in the second *dynamical* categories. The latter alone have correlates, the former have none; and this difference must, presumably, have its sufficient reason in the nature of the understanding.

2. Each of the four classes of categories has under it three sub-classes; and this gives to think, the rather, indeed, that all other division *a priori* through notions is necessarily a dichotomy. Again, under each class, the third category owes its origin to the union of the second with the first.

Thus *totality* is nothing else than *plurality* regarded as *unity; limitation* is *reality* in union with *negation; reciprocity* is *substances* exchangeably *causal;* and *necessity*, lastly, is *actuality* given, as it were, by *possibility* itself. For all that, the third category must not be considered derivative only, and not, in reality, primitive. In fact, the union in question for the result in question involves a special act of understanding, which is not the same with that exercised in the case of the first and second. For example, the notion of a *number* (under the category of totality), is not always possible where there are those of plurality and unity (as in the conception of the infinite). Neither from my uniting the notions of *substance* and *cause* is it at once possible to understand *influence*, or how one substance can be cause of something in another (and *v. v.*) It is clear that a special act

of understanding is required in such cases; and so of the rest.

3. In the instance of a single category, that of reciprocity, is its analogy with the correspondent logical form of the disjunctive judgment, not so striking, perhaps, as, similarly, in that of the others.

But for conviction here it is to be observed that, in all disjunctive judgments, the sphere (the amount of what is contained under each)[1] is conceived as a whole divided into parts (the sub-notions). And, further, these parts, as not contained the one under the other, are not thought as subordinated the one to the other, but as co-ordinated the one with the other; and so that they do not affect one another one-sidedly, as in a series, but reciprocally, as in an aggregate: one term being assumed, all the rest are excluded, and *v. v.*

Now, there is a like connexion thought in a *whole of things*, where the one is not subordinated as effect to the other as cause (of its existence), but, on the contrary, co-ordinated as again and reciprocally cause (of affections) in precisely this same other's regard (*e.g.*, in what is called *a body*, where the parts mutually attract, but also mutually exclude each other). And this is quite a different kind of connexion from what obtains in the mere relation of cause and effect (ground and consequence), where the result does not again reciprocally determine the antecedent, and (like the Creator with the creation) does not, therefore, constitute with it a whole. What process of understanding refers to the sphere of a distributed notion, that same process we observe in thinking a thing as divisible; and, as the members of distribution mutually exclude each other in the former, and yet together constitute a single sphere, so, in the latter, the parts

[1] "Each," for "ihm," here remedies a grammatical oversight.

are conceived as such that existence accrues to each (as a substance) in exclusion of the rest, but yet that all are bound together in a single whole.

§ 12.

There are to be found, however, in the transcendental philosophy of the ancients, certain pure notions of understanding, which are put forward by them as *a priori* notions of objects. These do not make part of our categories, and, if to be admitted, would increase their number; which, on our principles, is manifestly impossible. They occur in that well-known proposition of the scholastics, Quodlibet ens est *unum*, *verum*, *bonum*. The use of this principle, indeed, as issuing in mere tautologies, proved so unsatisfactory that, in modern times, any mention of it in metaphysic is pretty well only honorary. Nevertheless, how empty soever, a thought that has persisted so long merits always some inquiry into its origin, as well as justifies the supposition that it has its source in some rule of the understanding, which, as is often the case, has only been wrongly interpreted. These supposed transcendental predicates of things are nothing else, in truth, than logical requirements and criteria of all cognition of things in general. In fact, they only subject it to the categories of quantity—to unity, plurality, and totality. These, however, which ought, properly, to be only materially taken, as concerned with the possibility of things themselves, the ancients applied only in a formal sense as bearing on logical requirement in every cognition, and yet, at the same time, inconsiderately regarded them, though mere criteria of thought, as characteristics of things in their own selves. In every cognition of an object, namely,

there is *unity* of the notion; and this unity may be named a *qualitative* unity, in so far as there is thought under it only the unity of the embraced many of units in the cognition, as the unity of plot in a play, speech, story. The second requirement, *truth*, is truth in regard to the constitutive relations. The more true relations we have as depending on a given notion, the more signs we have of its objective reality. This we may name the *qualitative number of characters* inherent in a notion as their common ground (but not thought in it as quantity). The third requisite of *completeness* applies thus: the many, namely, are conversely brought back into the unity of the notion, and with this notion, and no other, they must fully coincide. Now this may be termed *qualitative completeness* (totality). From all this it is evident that these logical criteria of cognition in general apply here the three categories of quantity (in which, as such, the quantitative unity implied must be conceived to be thoroughly *homogeneous*), to connect as well *heterogeneous* elements in consciousness, and this through the *quality* of a cognition as principle. Thus the criterion of the possibility of a notion (not of an object) is the definition, in which the *unity* of the notion, the *truth* of its consequences, and the *completeness* of its relations, constitute what for reintegration of the whole notion is the requisite on the part of itself. Or it is thus also that the criterion of an *hypothesis* is constituted by, first, the intelligibleness of the principle adopted in explanation, or its *unity* (as without supplementary hypotheses); second, the *truth* (agreement with themselves and with experience) of the consequent relations; and, third, the *completeness* of the principle adopted in regard of these relations; which relations contain no more and no less

than was assumed in the hypothesis, and only present again *a posteriori* and analytically what was previously thought *a priori* and synthetically, at the same time that they are in entire harmony therewith. The notions, consequently, of unity, truth, and completeness, do not at all supplement the transcendental table of the categories, as though it were incomplete; but the application of these latter is (their reference to objects entirely overlooked) brought under general logical rules of the agreement of a cognition with its own self.

Chapter II.—Deduction of the Categories.

Section 1 (§ 13). Principles of a Transcendental Deduction in General.

Writers on jurisprudence, when discussing rights and their violations, distinguish, in an action at law, the question of law (*quid juris*) from the question of fact (*quid facti*); and, in requiring proof in both respects, they name the former, which is to make good the title (the right), the *deduction.* We commonly employ a number of empirical notions, without any one thinking to question them, and assume ourselves authorized, even without deduction, to impute to them a certain meaning, because we have always experience to fall back upon in proof of their objective reality. There are also *usurped* notions, as Fortune, Fate, which pass current with almost universal assent, but are at times called upon for an answer to the *quid juris;* and then the deduction of them proves a matter of no small difficulty, for neither from experience nor reason can any clear title be produced for them.

But among the many notions which constitute the

very mingled web of human cognition, there are some which are destined to serve a purely *a priori* purpose (entirely independent of all experience); and these always require for their title a deduction. For proofs from experience are incompetent in such a case, and yet we would understand *how* these notions *can* enter into and refer themselves to objects, for the idea of which objects they (these notions) owe nothing to experience. I call the explanation, then, of how *a priori* notions can have this application to objects of experience the *transcendental deduction;* and distinguish it from the *empirical deduction* which for the origin of an idea appeals to sensation and reflection, and, in this way, involves not the right of use, but the fact of existence.

We have now found two quite diverse elements, which, however, agree in being both *a priori* constituents of objects of experience; namely, on the one hand, space and time as forms of sense, and, on the other, the categories as forms of intellect. To require an empirical deduction of these would be a futile want; for what is distinctive of their nature lies precisely in this, that they connect themselves with objects without owing anything to experience for the idea of these objects. If, then, a deduction at all is required for these, that deduction, plainly, must be always transcendental.

At the same time, in the case of these notions, as in that of all cognitions, we can rightly enough inquire, not for the principle of their possibility, but for the occasions of their appearance in experience. It is certainly the impressions of the senses which give the first stir to the production of experience, and the movement of cognition in every reference. Still, experience, or cognition generally, includes in

itself two very dissimilar factors, namely, a *matter* derived from the senses (sensation), and a certain *form* (for the ordering and arranging of this matter) which is due to the inner source of understanding and *pure* perception. Now, it is on occasion of the former element (sensation) that the latter faculties of form are moved to bring forward and introduce their *a priori* contributions. An inquiry into the earliest struggles of our faculties in order to ascend from particular perceptions to general ideas, has undoubtedly its own great use; and we have to thank the illustrious Locke for having first opened the way to this. But then a *deduction* of what is *a priori* can never possibly be brought about in that way. What is *a priori* lies quite in another region; and must produce, for its license of use in the future (inquiries beyond limit of experience), quite another certificate of birth than that furnished by the senses. The attempted physiological derivation, therefore, which concerns only a question of fact, and can never be properly called deduction, I shall denominate the proof of our *possession* of elements, which elements may still be *a priori*. But it is clear that of such elements it is a transcendental, and not an empirical, *deduction* that is required. The latter, indeed, in an *a priori* reference, must prove always a vain attempt, on which only he will venture who completely mistakes the quite peculiar nature of the interest in hand.

Although, however, it be granted that the only possible deduction of what is *a priori* must be transcendental, it does not immediately follow therefrom that such deduction is unavoidably necessary. We have now, by means of a transcendental deduction, traced space and time to their sources, and we have demonstrated and made good their *a priori* objective

validity. Nevertheless, geometry goes its own sure way with mere *a priori* elements, without any call to exact of philosophy a letter of credit in respect of the pure and legitimate origin of its basal notion, space. But the use of that notion in this science applies plainly to the external world of sense, of the perception of which space is the pure form, and in which, therefore, every geometrical cognition, as founding on *a priori* perception, has its immediate evidence. The cognition itself here, in fact, assumes its objects as (in form) *a priori* given in perception. On the other hand, there arises with the categories an absolute necessity to call for their transcendental deduction; and not for theirs only, but for that of space also. The categories, namely, do not in themselves act upon objects through predicates of perception and sense, but of pure *a priori* intellect: they refer to objects generally without all conditions of sense. They neither bring their title from experience, nor can they foreshadow in *a priori perception* objects on which before all experience they might found their synthesis. The consequence is that they raise doubts not only as regards the objective validity and limits of their own use, but even make equivocal the notion of space. For space, objectively, is applied by them beyond the powers of sensuous perception. Hence the necessity of a transcendental deduction, as above, for space as well.[1] The reader, then, must convince himself of the indispensable necessity of such transcendental deduction, before he has taken a single step in the

[1] The above conveys one of Kant's long and involved sentences. The reasoning is that, though geometry is of an *a priori* nature and yet calls for no deduction, the case is not the same with the categories. They require to be deduced, and not only they, but the space which they use, and must use, for any possible application on their part to objects at all, pure or empirical. It is the introduction of space into the sentence

field of pure reason. Otherwise he will proceed only blindly, and will find himself, after many wanderings, obliged to return to the ignorance from which he had set out. He must, however, make the inevitable difficulties clear to himself beforehand; in order that he may not object obscurity when it is the matter is deep, or be too soon disheartened when hindrances obstruct. For it comes to this, either to give up all claim to discoveries of pure reason, and in that her dearest field beyond the bounds of all possible experience, or else to complete the present critical inquiry.

We have, with little difficulty, made intelligible above how space and time, though cognitions *a priori*, join themselves, nevertheless, necessarily to objects, and render, in independence of all experience, a synthetic cognition or perception of objects possible. For, inasmuch as only through such pure forms of sense an object can appear to us (that is, before it can be an object of empirical perception), space and time are pure perceptive forms (*a priori* objects), which are *a priori* conditions of objects of experience, and synthesis in them is of an objective validity.

The categories of understanding, on the other hand, have nothing to do with conditions of perception (in the strict sense), and there certainly may very well be presentations of objects so far as sense is concerned, without there being any necessity to refer them to functions of the understanding at all. Understanding, so far, need not involve, in formation of objects, any *a priori* influence whatever. In this relation, indeed,

particularly, which, as it were, throws all the measures across. I am disposed, also, to see verbal errors here: "redet" should be *reden*, and I would even altogether expunge the "die" after the "und." Kant's thought is, Categories, not being, *directly* or *properly*, perceptive, show a difficulty and a need of deduction (the latter, too, for the space they *use*) not shown at first hand by geometry, etc.

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there shows a difficulty which we did not find when employed on sense. How, namely, *can* subjective conditions of *thought* conceivably at all exert an *objective* function—that is, how can they furnish conditions of the very possibility of all perception and experience of objects? For, surely, presentations may be given in sense, pure or empirical, without calling in any function of the understanding. I take, for example, the notion of cause, which implies a particular sort of synthesis, where on something, A, there ensues, by necessity of a law, a something else, B, that is quite different from A. Now, it is useless to refer to experience in proof of any such notion, which, as containing necessity, can be proved objectively valid only *a priori*. It is, in the first instance, difficult to understand, then, how sense-presentations should exhibit any such virtue; and we may at first very much doubt whether any such claim, any such idea, be not altogether void, and without correspondent object anywhere among the presentations in sense. For that objects of sensuous perception must obey what formal conditions of sense in general lie *a priori* in the mind, is clear from this, that, on other terms, they would not be objects for us. It is not so easy to see, however, that they must also obey conditions required by the understanding for synthetic perception on the part of the intellect. For presentations in sense might very well be of such a nature that the understanding would not find them at all accordant to the conditions of its unity, but, on the contrary, all in such confusion, that, for example, in the succession of presentations there were nothing to be found capable of affording a rule of synthesis, and correspondent, therefore, to the notion of cause and effect; which notion, consequently, were null and void, and without sense. Presentations

in sense would not the less for that furnish us with objects so far perceptive; for perception, so far as strictly sensuous, stands nowise in need of the functions of the intellect.

Did we think to rid ourselves of the difficulty of such inquiries by saying, Experience affords continual examples of such submission to law in the objects of sense, which examples furnish abundant occasion for abstracting the notion, cause, and thereby ratifying at the same time the objective validity of such a notion, then we forget to observe that the notion, cause, cannot arise in this way, but that it must either be based completely *a priori* in the understanding, or else utterly abandoned as a mere chimera. For this notion demands absolutely that something, A, be of such a nature that something else, B, ensues from it, necessarily, and by virtue of an *unconditionally universal law*. Sense certainly, however, gives examples from which we may infer a rule of what usually happens, but never of what *necessarily* happens. Hence there belongs to the synthesis of cause and effect a dignity which can never be empirically expressed; namely, that the effect not merely comes after the cause, but is given by it, and ensues from it. The rigorous universality of the rule, too, is not at all a possession of empirical rules which, as through induction, can have no more than comparative universality, that is, a certain extended application. The validity of the categories would be completely changed, then, were we to regard them as merely empirical products.

§ 14. Transition to the Transcendental Deduction of the Categories.

There are only two cases possible, in which synthetic perception and its objects can coincide and

necessarily refer to one another. Either the object makes the perception, or the perception the object, alone possible. In the first case the circumstances are only empirical, and the perception is not possibly *a priori*. This case is that of presentation in sense, and, specially, of what belongs to sensation in them. In the second case, again, no mere mental act (for there is no question here of the causality of will) being competent to produce an existent object, a perception can only then be *a priori* operative in regard of an object, when through it alone it is possible for us to perceive something as an *object* (cognise it as a factor in actual experience). Only under two conditions, however, is such cognition of an object possible. There is, first, perception proper, by which the object is given, but, so far, only as intimation to sense. There is, second, notion, by which, in correspondence with the elements of sense, an object is fairly thinkingly perceived in experience. It is clear, however, from what has been said further back, that the first condition, that, namely, under which alone objects can be (taking the word strictly) *perceived*, must, in effect, be presupposed for, and basally underlie, objects, so far as form is concerned, *a priori* in the mind.[1] With this condition of sense, therefore, all objects necessarily agree; for only through it is it possible for them to show in sense, or to be empirically given and perceived. Now the question is, whether there are not also precedent notions *a priori*, as conditions under which alone anything is, though not sensuously, yet cognitively, perceived as an *object* (as such); for, in that case, all empirical cognition of objects (formed perception of them as in experience) is necessarily subjected to, or in conformity with, such

[1] After "liegen" I add a *muss* here, which seems necessary.

notions, inasmuch as without presupposition of them nothing whatever is possible as an *object of experience*. But, now, every perceptive experience involves, besides the elements of sense, by which something is given, still further a notion of an object, or a notion uniting the sense-elements into a one object, which one object appears then as given in cognitive or formed perception. On that understanding, consequently, there are notions, bearing on objects as objects, *a priori* presupposed as conditions that basally underlie all cognition or perception of experience. And the objective application of the categories, therefore, as *a priori* notions, is based on this, that through them alone is experience (so far as relates to the form of thought—the involved function of intellect) at all possible. For then they have a necessary and *a priori* bearing on objects of experience, inasmuch as only through them as universal condition can any object whatever of experience be *cognitively* perceived.

The transcendental deduction of all *a priori* elements has, therefore, a principle directive of the whole inquiry, this, namely, that they must be recognised to be *a priori* conditions of the possibility of experience (whether as of sense or of understanding). Elements which furnish the objective ground of the possibility of experience are for that very reason necessary. An analysis, however, of the experiences in which they occur, would not constitute their deduction, but, as in that way they would still remain contingent, only their illustration.[1] Without

[1] In the above three sentences I translate as though a plural Erfahrungen and a singular Erfahrung had changed places as regards the first and last of them. The plural in the first sentence seems proved wrong by a singular "ihr" which follows and, as I think, in its reference.

this primary reference to possible experience, which holds of all objects in perception, the application of these *a priori* elements to any object could not be possibly understood.

The celebrated Locke, for want of such consideration, and because he found in experience pure notions of the understanding, actually derived such notions *from* experience, and proceeded so inconsequently that, simply in trust of them, he ventured on cognitions that far transcended all limits of experience. David Hume saw that, for this to be possible, it was necessary that said notions should be possessed of an *a priori* origin. As, however, he could not at all explain to himself how the understanding, in the case of elements of experience that were not to it *in themselves* connected, did yet feel forced to think them necessarily connected in objective experience; and as, in view of this inability, it did not occur to him to reflect that perhaps the understanding was itself, and through these very elements, the actual originator of that precise experience in which the objects showed —in such circumstances he believed himself under a necessity to derive them only from experience. He attributed them, namely, to a subjective necessity due to repeated associations in experience (*custom*), which subjective necessity was, in this way, at last, taken to be objective, but erroneously so. His resultant conclusion, however, was perfectly consequent: he declared it to be impossible to transcend experience with any such principles. The empirical derivation, nevertheless, which is all we have in either, cannot possibly be reconciled with the actuality of those scientific *a priori* cognitions which we have in pure mathematics and pure physics, and is, therefore, refuted by the *factum*.

The first of these celebrated men opened a wide door to *fanaticism;* for reason, if once with any title on its side, is no longer to be kept in bounds by any mere vague exaltations of prudence and moderation. The second, again, quite abandoned himself to *scepticism*, in the conviction that he had once for all discovered, on the part of our faculties, a mere deception that was universally held to be reason. We are now on the threshold of the inquiry whether it be not possible to steer human reason between both rocks, assign it its definite limits, and yet keep open for it the entire field of its legitimate action.

I begin with the definition of the categories. They are notions of objects generally, by which the sense-elements of these objects are conceived to be determined in respect of one or more of the various logical functions of judgment. Thus the function of the categorical judgment is that of the relation of the subject to the predicate, as, All bodies are divisible. But here, so far as concerns the mere logical use of the understanding, it remains undetermined to which of the two notions the function of subject, and to which that of predicate, accrues. For we might quite as well have said, Certain divisibles are bodies. But by the category of substance, now, it is determined of the notion body, when subjected to it, that its empirical perception in experience must be always regarded only as subject, and never as predicate. And so of all the other categories.

Section 2. Transcendental Deduction of the Categories.

§ 15. Of the Possibility of a Conjunction in General.

The constitutive units may be given in a perception which is merely sensuous, or nothing but receptivity, and the form of this perception may lie *a priori* in our faculty, without being anything else, however, than how the subject is passively affected. But the *conjunction* of these or any units is not possibly an affair of *sense*, and can, therefore, not be found as an element or action involved even in the pure form of sense-perception (space, etc.) For it is an *actus* of the mind's own faculty, and as in contradistinction to sense we must name this faculty understanding, it follows that all conjunction, conscious or unconscious, in perceptions or in notions, in elements pure or in elements empirical, is an act of the understanding to which we would give the general appellation of *synthesis*.[1] We use this term, namely, to signalize the fact, as well that we cannot be aware of anything conjoined in the object which we have not previously conjoined in understanding, as of conjunction being, among all perceptions, the only one which cannot be given by objects, but must be effected only by the subject's own self, because it is an *actus* of self-action or spontaneity. It is easy to be understood here that this *actus* must be originally *monome* (strictly *one*), and of force for all conjunction, as also that the resolution (*analysis*) which seems to be opposed to it, does yet, for all that, always presuppose it; for where understanding has not already

[1] The words "sinnlichen oder nicht sinnlichen Anschauung," if certainly Kant's, must be held to have meant for him, in the one case, *special*, and, in the other, *pure* sense. The latter of them is specially misleading, as literally contradictory of the most current expressions.

conjoined, neither can it disjoin, inasmuch as only through it can anything, as conjoined, be offered to our perception.

But the notion of conjunction carries with it, besides those of the complex of sense-units and their synthesis, that of their unity as well. Conjunction is synthetic unity of a complex.[1] The cognition of this unity can, therefore, not arise from the conjunction; rather, by adding itself to the cognition of the complex, it first makes the notion itself of conjunction possible. This unity, which precedes *a priori* all notions of conjunction, is not possibly said category of unity (§ 10); for all categories found on logical functions of judgments, in which conjunction is already thought, and, consequently, unity of given notions. The categories, therefore, already (in their own selves) presuppose conjunction. We must, therefore, seek this unity (as qualitative, § 12) still further back; we must seek it, namely, in what is the ground of that unity in the judgments themselves, or in what, consequently, is the ground of the understanding itself in its very logical function.

§ 16. Of the Original or Primary Synthetic Unity of Apperception.

The *I think* must be capable of accompanying all my perceptions; for otherwise there would be something placed in my consciousness which could not be thought; and that is as much as to say that the perception itself would either be impossible or else

[1] Whether the cognitions themselves are identical, and the one, therefore, can be thought, analytically, through the other, is not in consideration here. The consciousness of the one, so far as the complex is in question, is always to be distinguished from that of the other, and it is only the synthesis of this latter (possible) consciousness that is here concerned.—K.

nothing for me. That form of apprehension which precedes thinking is called perception. All the units, therefore, of a perceptive complex is necessarily conjoined with the *I think* of the subject holding them. This, however, is an act of spontaneity, and cannot be thought as due to sense. I call this the Pure Apperception, to distinguish it from the empirical. It may be named also the Original (Primary) Apperception, inasmuch as it is that self-consciousness which, while it produces the all-attendant and ever-identical consciousness *I think*, cannot be accompanied by any further one. I call also the unity in it the transcendental unity of self-consciousness, in consideration (or indication) of its being a source of possible cognition *a priori*. For the units in any perception would not be collectively *my* perceptive units, did they not collectively belong to a single self-consciousness. Or these units as mine (though consciousness may not be specially awake to them as such) must be necessarily submitted to the condition under which alone it is possible for them to stand together in a single self-consciousness, for otherwise they would not, one with the other, belong to me. Now from this original synthesis there follows much.

This pervading identity of apperception, namely, throughout the units of a perception, necessarily implies a synthesis of these, and is possible, at the same time, only through consciousness of this synthesis. For what empirical consciousness accompanies our bare sense-intimations or sense-feelings is naturally loose, and, as regards the identity of the subject, inconsiderate or inadvertent. Synthesis into this identity, indeed, does not straightway result from this, that I accompany each of the units with consciousness: I must, further, actually *add* the units

the one to the other, and become conscious of this, their resultant synthesis. Only by this, therefore, that I can conjoin the units of given intimations *in a single consciousness*, is it possible for me to conceive the *identity of consciousness* in these *intimations* themselves. The *analytic* unity of apperception is only possible under presupposition of a certain synthetic one.[1] The thought, These units given in perception are collectively mine, is, accordingly, as much as to say, I unite them, or at least can unite them, in a single consciousness; and though this thought is not yet itself the consciousness of the synthesis of the units, it yet presupposes the possibility of this. That is, only by comprehending the complex of units in a single consciousness, do I make them singly and collectively mine. Otherwise I should have as many-coloured and diverse a self as I have units in consciousness. Synthetic unity of the complex of perceptions as given *a priori*, is the ground, therefore, of that identity of apperception itself which *a priori* precedes any definite act of thinking on my part. Synthesis, however, is not in the objects, and cannot possibly be borrowed from them, or only first of all taken up into consciousness, through perception: it is

[1] The analytic unity of consciousness attaches to all common notions as such. For example, when I think *red*, I think something which may be found as element in something else, that is, something which is conjoined with others. Only, therefore, through a preconceived (a previously thought) possible synthetic unity can I conceive the analytic one. A unit of consciousness, which is to be thought as common to several, is regarded as belonging to such as, besides it, have something else in them; it must, consequently, be already thought in synthetic unity with others (though these may be only possible), before I can think by it of the analytic unity of consciousness which makes a *conceptus communis* of it. And thus the synthetic unity of apperception is the ultimate point on which we must base all intellect, even the whole of logic, and with logic, transcendental philosophy; nay, apperception is the understanding, the intellect itself.—K.

an act of understanding alone, which itself, indeed, is nothing but the faculty whose single function it is, *a priori* to conjoin, and to bring the complex of given perceptions under the unity of apperception. This principle is the ultimate principle in all human cognition.

This proposition, of the necessary unity of apperception, is certainly, now, itself, identical, and therefore analytic. Nevertheless it involves a synthesis of any given perceptive complex as necessary. And without this synthesis, said pervading identity of self-consciousness cannot possibly be thought. For in Ego, as a simple thought, there is nothing of a complex given. In the empirical feeling, which is different from the mere thought, is it alone that the relative complex can be given, and through synthesis in a single consciousness, as it were, perceived. An understanding in which the involved complex were at once given by self-consciousness, would perceive, would be intuitive. Our understanding can think only, and must have recourse to the senses for perceptive or intuitive matter. I am conscious, then, of my identical self in regard of the units in any given perception, because I name these units singly and collectively mine; and collectively they constitute a single perception. That, however, is as much as to say that I am conscious of a necessary synthesis *a priori*, which is called the original synthetic unity of apperception: that all units of perception given me stand individually under it, but that they must be *brought* collectively, as well, or through a synthesis, under it.

§ 17. The Axiom of the Synthetic Unity of Apperception is the Ultimate Principle of the Understanding.

The ultimate principle of the possibility of all perception *in relation to sense*, was, according to the transcendental æsthetic, this, That the units of every such complex must stand under the formal conditions of space and time. The ultimate principle of the possibility of all perception, *in relation to the understanding*, is, That the units of every perceptive complex must stand under conditions of the original-synthetic unity of apperception.[1] All units of perception stand under the former, so far as they are given to us; and under the latter, so far as they must be capable of being conjoined in a single consciousness. For without such conjunction there would be nothing thinkingly cognised or recognised (as in experience), inasmuch as the units given by sense would not have the *actus* of apperception, *I think*, in common, and would not be brought together thereby into a single consciousness.

Understanding is, to speak generally, the faculty of *perceptive cognitions* (or *recognitions*). These consist in the definite conjunction of given units—their conjunct reference—into an object. *Object*, again, is that in the notion of which the units of the perceptive complex are *united*, are made *one*. But all such union demands unity of consciousness in its very synthesis. The unity of consciousness, therefore, is

[1] Space and time, and all the parts of either, are *perceptions*, and one, consequently, with the many of their constituent complex (s. Trans. Æsth.) They are not mere *notions*, then, which, as such, are each a one and the same consciousness in a plurality of individuals. On the contrary, they are, each of them, a plurality of parts in a single consciousness (that, in fact, *of* them). These parts, then, being set together in that consciousness, there is plainly involved a unity of consciousness which is synthetic and also original or primary. This *singleness* of consciousness is important in application (s. § 25.)—K.

alone what constitutes this conjunction of units into an object, or the objective realization of these, or the fact that they are objectively perceived in experience. It is on the unity of consciousness, consequently, that the possibility of the understanding itself rests.

The first pure fact of understanding, therefore (towards formed perception), which conditions its whole further action, and which, at the same time, moreover, is apart from any condition of *sense*-perception, is the principle of the original synthetic unity of apperception. Thus the mere form of external sense-perception, space, is not yet a finished perception: so far, it only supplies the *a priori* perceptive complex towards a possible finished perception. But actually to discern *something* in space, a line, I must *draw* it. That is, I must synthetically effect a certain particular conjunction of the space-units (as yet only given), and in such manner that the unity of this act is at the same time the unity of consciousness (in the idea of a line.) Only in this way, plainly, is it first of all possible for an object (a marked off space) to be discerned. The synthetic unity of consciousness, therefore, is an objective condition of all formed or finished perception in experience. Not only is it necessary to enable me to perceive an object; but just to *be* object every sense-perception must stand under it. In any other way, or without this synthesis, the units of the perceptive complex would not unite themselves together in a single consciousness.

This last proposition is, as said, at the same time analytic, even while source of the synthetic unity as condition of all possible intellection. For it says only that all my units of perception in any given case

must stand under the condition under which alone it is possible for me to reckon them as mine into my identical self, and therefore to comprehend them, through the all-present expression, *I think*, as synthetically conjoined in a single apperception.

This principle, however, is not such as to cohere with every possible understanding as such. It is proper only where the *I am* of pure apperception brings with it no complex, or breadth, as of units in consciousness. An understanding, where self-consciousness brought at once its own constituent discernible many, or an understanding, in whose subjective act its objects at once were,—such understanding would not stand in any need of a special act of synthesis in a complex in order to attain to a unity of consciousness. Such special act is the necessity of the human understanding which, as an understanding, thinks merely and does not perceive.[1] For the human understanding, however, this act is the indispensable first principle. So much is this the case that our understanding, in fact, is unable to form to itself the least idea of any other possible understanding, whether such as were itself perceptive, or such as, though only perceptive through sense, were yet otherwise perceptive than through forms of space and time.

§ 18. What Objective Unity of Self-Consciousness is.

The transcendental unity of apperception is that unity through which all the complex units given in a perception are united into a notion of the object

[1] In the above, there is an awkward use of both cases at once which bedürfen *may* govern. In these, too, the genitive "deren" really refers to the accusative "Actus," and, consequently, were better *dessen*.

constituted by them. For that reason this unity is called objective, and must be distinguished from the subjective unity of consciousness. This latter is only the inner affection of sense whereby a perceptive complex is (for such union) empirically given. Whether I shall be empirically conscious of the units in the complex as given together, or as given the one in succession to the other, depends on *circumstances*, or empirical conditions. Hence the empirical unity of consciousness (through association of the units) is itself a sense-appearance, and quite contingent. On the other hand, the pure form of perception in time, merely as such perception, and involving, consequently, a given complex of units, stands under the original unity of consciousness, solely in consequence of the necessary conjunction of the units of perception into the one single *I think* (or, *it is I that am thinking*). That is, it so stands, solely in consequence of the pure synthesis of understanding, which synthesis (as relating only to an *a priori* complex), is evidently presupposed *a priori* to underlie any empirical synthesis. The former unity is alone objectively valid (the same, and in the same way binding, for every one). The empirical unity of apperception (which is not considered here, but which, under given circumstances *in concreto*, only results from the other), has merely a subjective validity. One man, for example, unites the hearing of a certain word with one thing, and another with another. Thus, evidently, the unity of consciousness, when bearing on what is empirical, is not necessarily and universally valid in regard of anything so given.

§ 19. The Logical Form of all Judgments consists in the Objective Unity of the Notions they contain.

I have never been able to feel satisfied with the definition which logicians give of a judgment. It is, they say, the statement of a relation between two notions. Now here, without objecting to the definition that it applies only to categorical, and not to hypothetical or disjunctive propositions (where the relation is not between notions but judgments), I remark only (not but that the oversight has been detrimental to logic), that, in the definition, there is no declaration of what the relation consists in.[1]

If, however, I more accurately examine the nexus of the given ideas in every judgment, and distinguish it as due to the understanding, from the relation that depends on laws of reproductive imagination (which relation possesses only a subjective validity), I find that a judgment is nothing else than the method of bringing given ideas into the objective unity of apperception. It is the very business of the little word *is* in them to distinguish the objective unity of given ideas from the subjective one. For this word designates the reduction of these ideas into the original apperception, and their *necessary unity*, even although the judgment be only an empirical one and, consequently, contingent; as, for example, Bodies are heavy. Here, I do not mean to say that these ideas belong in the empirical perception *necessarily* the one

[1] The whole long doctrine of the four syllogistic figures concerns only categoricals, and though it is nothing more than an art, through concealment of immediate inferences (*consequentiæ immediatæ*) under the premises of a pure syllogism, to produce the false show of more kinds of syllogisms than are contained in the first figure, it would not have particularly succeeded in this, had it not contrived to call attention exclusively to categoricals as those propositions to which all the others must be reduced; which, however (§ 9), is not the case.—K.

to the other, but that they belong the one to the other by virtue of the *necessary unity* of apperception in the synthesis of sense-perceptions. That is, they belong the one to the other according to principles of the objective determination of all cognitive elements, so far as they are competent to yield an objective perception; which principles derive all of them from that of the transcendental unity of apperception. So only there is made of said relation a *judgment*—a relation that is objectively realized, and easily distinguishable from the relation of the very same elements when it is only subjective, as being referred, for example, only to the laws of association. In the latter reference, I should only be able to say, If I lift a body, I feel a sense of weight; but not, The body is heavy. This last proposition imports that the two ideas or elements are conjoined *in the object* (without consideration of the mere state of me, the subject), and not simply beside each other in the sense-affection, let it be repeated as often as it may.

§ 20. All Perceptions of Sense stand under the Categories, as Conditions under which alone the Units of their Complex can unite together and coalesce into a single Consciousness.

The complex of units given in a perception of sense, falls necessarily under the original synthetic unity of apperception, inasmuch as through this unity alone is the unity of the perception possible (§ 17). But that act of the understanding through which the units of a complex (whether perceptive or notional) becomes reduced into a single apperception, is the logical function of the technical judgments (§ 19). Every complex, therefore, so far as it is given in a single empirical perception, has been *determined* by one of

the logical functions of judgment, or by this function of judgment it has been brought into a single consciousness. But now the categories are nothing else than precisely these functions to judge, so far as some given complex of perception comes to be determined of them (§ 13). Hence all given perceptive complexions stand necessarily under categories.

§ 21. Remark.

A complex, which is contained in a perception that I call mine, gets reduced into the necessary unity of self-consciousness through synthesis of the understanding, by the categories.[1] This synthesis implies that the empirical consciousness concerned with a given complex of a one perception, stands as well under a pure *a priori* self-consciousness, as empirical perception stands under one of pure sense which is likewise *a priori*. In the above proposition (§ 20), then, is there a commencement made of a *deduction* of the categories. In this deduction, said categories *being independent of sense* and wholly in the understanding, I must still as yet abstract from the manner in which the perceptive complex gets given, in order to direct attention only to the unity which the understanding by means of its categories produces in the perception. In the sequel (§ 26), it will be shown, from the mode in which the empirical perception is given in sense, that the unity in this perception is no other than what (§ 20) the categories determine in a given perceptive complex. And by this, then, that

[1] The proof rests on the assumed unity of perception through which there is an object. Said unity always implies synthesis of the perceptive many, and the reduction of this latter into the unity of apperception. —K.

the *a priori* application of the categories is demonstrated as in regard of all the objects of our senses, will the design of our deduction be at length fully realized.

But in the above proof I could not abstract from one element; from this, namely, that the complex must be given for the perception before, and in independence of, the synthesis of the understanding; but in what manner we do not here pronounce. For, did I assume an understanding which (as such) *perceived* (as a divine understanding which, possibly, produces its objects *in* its perception, and has them not *given* only *to* it), the categories would be without application in regard of such cognition. They are only rules for an understanding whose whole faculty (as an understanding) consists in thinking; that is, in the process to bring into the unity of apperception, the synthesis of what perceptive complex may be given it from elsewhere. Such an understanding of itself *perceives* nothing whatever; but only conjoins and orderly disposes the matter, the sense-elements, of perception, which are given it by the object. Of the peculiarity of our understanding, however, only through categories, and only through that kind and number of them, to bring about *a priori* unity of apperception, we can as little assign a reason as we can explain why we have precisely these and no other functions of judgment, or why time and space are the sole forms of our possible perception.

§ 22. The Categories have no other Application in Cognition than to Objects of Experience.

To think an object, and to perceive an object, are not one and the same thing. There are, namely, in

perception two factors. There is, first, the notion (category) whereby an object is *thinkingly* perceived; and there is, second, the sense-elements whereby it is given. For if to the notion no corresponding sense-presentation could be given, the former would be only a formal thought without an object, and, consequently, not possibly capable of affording perceptive recognition of anything whatever. There might be, indeed, so far as I could know, not anything, not even possibly anything, whereto my thought might apply. Now, all perception possible for us is sensuous (Æsthetic); the thinking of an object, therefore, by means of a category, can only become for us a perceptive recognition in so far as this category is brought to bear on objects of the senses. Perception of sense is either pure (space and time), or empirical (what is perceived, through sensation, as directly actual in space and time). Through determination of the former, we obtain (in mathematic) *a priori* perceptions of objects, but only in their *form* as presentations to sense; whether there are possibly also actual things which are to be perceived in such form, remains, so far, still undetermined. Consequently no mathematical notion is in itself perception, unless there be presupposed things, also, which are capable of being realized by us only as in accordance with the form of said pure sensuous perception. *Things in space and time*, however, are only realized by us *through* empirical perception, or so far as they are sense-perceptions, perceptions accompanied by sensation. The categories, consequently, even in application to *a priori* perceptions (as in mathematic), afford perceptive cognition or recognition, strictly, only so far as these *a priori* perceptions, and consequently also through them the categories, are capable of being

applied to empirical objects. The categories, consequently, even with pure perception, yield us no knowledge of things, unless as in reference to their possible application empirically; that is, they serve only for the possibility of empirical perception and cognition. But that is *experience*. Consequently the categories have a share in the cognising of things, only in so far as these things actually are, or are taken to be, empirical.

§ 23.

The above proposition is of the greatest importance; for it just as much determines the limits of the share of the categories in objects, as the Æsthetic similarly determined in regard to the pure form of our sense-perception. Space and time function, as conditions of the possibility of how objects can be given us, no further than as regards objects of sense, or no further than as regards experience. Beyond these limits they stand for nothing; for they are only in the senses and have no reality apart from them. The categories are free from this restriction, and apply to objects of perception as such, if only sensuous and not intellectual, let it be like to ours or not like. This extension beyond *our* sense helps us, however, as on their part, to nothing. For they are then void notions of objects, of which objects, whether they are even possible or impossible, these notions themselves cannot possibly enable us to judge. They are mere thought-forms without objective reality, for we are without a perception on which to apply the synthetic unity of apperception involved in them, and so render them themselves available in the relative objective determination. *Our* sensuous and empirical

perception can alone procure for them sense and meaning.[1]

Let us suppose ourselves to assume, for example, an object that is an object of a perception which is *non-sensuous*. Such an object we may determine, of course, by all the predicates which the assumption itself involves—the assumption *that it has nothing of a sense-perception in it.* It is not, therefore, extended or in space; its duration is not a time; there is no time-succession of *modi*, no such thing as change, in it, etc. But that is not an objective cognition proper, in regard to which I only name how the perception of the object is *not*, and remain unable to say anything that it positively is. I have not then done anything to indicate the possibility of an object for my category; or I have not been able to assign a perception which should correspond to it. I have only been able to say, rather, that our perception is, as regards any such object, without a bearing. Nay, the most important distinction here yet is this: that to any such supposed object, there cannot be applied even any one single category. How apply that of substance, for instance, or the notion of something, such that it can exist as subject, but never as mere predicate, and in regard to which I do not at all know whether anything whatever can possibly exist as correspondent to the thought—nor can know, unless empirical perception provide me in an actual case that is actually applicable? But of this again.

§ 24. Of the Application of the Categories to the Objects of Sense.

The categories bear, through the mere understand-

[1] Rosenkranz has an "allen" here which, very evidently, should be *allein.*

ing, on objects of perception as perception, if only sensuous, no matter ours or another; but are, for that very reason, mere *thought-forms*, through which (as such) there is not any actual object cognised. The synthesis or conjunction of the units in *their* (intellectual) complex held only of the unity of apperception, and was through it the ground of the possibility of perceptive cognition *a priori*, so far as such cognition depends on the understanding, and is, consequently, not only transcendental, but also merely pure-intellectual. There is basally presupposed in us, however, a certain form of sense-perception *a priori* which rests on the receptivity or susceptivity of impressions (a *sensibility* as such). Now, understanding, as spontaneity, is to be conceived capable of determinatively acting on the units of complex in inner sense, under and in accordance with the synthetic unity of apperception. That is, understanding may be conceived to think synthetic unity of the apperception of the complex [1] of *a priori sense-perception*, as the condition under which all objects of our (human) perception must necessarily stand. In this wise, then, it is that the categories, though mere thought-forms, get *objective reality*, or actual presence as factors in objects which may be given us in sense. These objects, too, must be understood as only appearances to, or presentations in, sense while as yet only sense-given; for only in regard to objects of such a nature are we capable of a perception *a priori* or of *a priori* perceptive forms.

The sense-synthesis, *a priori* possible and necessary, may be named the *synthesis speciosa* or *figural* one, in

[1] It is possible to give a sense, and so reconcile one's self to the phrase "apperception of the complex." Certainly, however, "apperception" ought to be *apprehension*.

contradistinction to that which, with a bearing only on perception as such (on any perception whatever) were a matter simply of *thought* in the category, and accordingly to be named synthesis in understanding, or *synthesis intellectualis*. Both syntheses—that of *a priori* sense (time and space) and that of the categories—are transcendental. They are transcendental, too, not simply because they *a priori* precede other constituents of objective knowledge, but because also they are grounds *a priori* of the very possibility of that knowledge.

But, again, the figural synthesis must, when considered as bearing on the original synthetic unity of apperception, or on the transcendental unity, that is, which functions in the categories, be named, as in contradistinction to the merely intellectual conjunction, the *transcendental synthesis of imagination*. Imagination is the faculty or power to exhibit an object in perception, even *without the presence of that object*. Inasmuch, now, as all our perception is sensuous, imagination, too, must hold of sense, so far as concerns the subjective condition under which alone it can offer to the categories a correspondent perception. So far, again, as its synthesis is an action of spontaneity, which is determinant, and not, like sense, merely determinable—so far, that is, as it can, under and in accordance with the unity of apperception, *a priori* determine sense in its form—imagination is a faculty which *a priori* acts upon sense. Accordingly, its synthesis of perceptions, under the categories, must be named the transcendental synthesis of imagination. This synthesis is the result of an action of understanding on sense, and is the first application of the former (ground, too, of all its other applications) in the direction of objects of what per-

ception is possible to us. As figurate or figural, this synthesis is distinguished from the intellectual synthesis that, without imagination, is to be conceived to lie wholly in the understanding. So far as imagination is possessed of spontaneity, I sometimes name it *productive* imagination, and distinguish it thus from the *reproductive*. Synthesis with the latter depends solely on empirical laws, those, namely, of association; consequently, it cannot contribute anything in explanation of the possibility of *a priori* principles of objective perception, and, accordingly, being without position in transcendental philosophy, is relegated to psychology.

* * * * *

Here now is the place to explain the paradox which, in the exposition of the form of inner sense (§ 6), must have struck every reader: namely, how this sense can exhibit to consciousness even our own selves, not as we are in ourselves, but only as we appear to ourselves; and for the reason that we only perceive ourselves as we are internally *affected*, which seems a contradiction, seeing that in that case we should have to relate ourselves to our own selves passively (that is, be acted on by our own selves). Hence we find it usual, in the current systems of psychology, to regard inner sense and the faculty of apperception as identical: we, for our own part, however, desire carefully to distinguish them.

What acts upon the inner sense is the native function of understanding to unite a perceptive complex, or to bring such under an apperception (as that on which its very possibility depends). As now, in us men, understanding is no faculty of perception proper, and perception itself, grant it even to be actual so far as depends on sensation, cannot, within or of itself,

apprehend, so as to unite and connect, as it were, the manifold of its own self, it follows that the synthesis of understanding, considered apart and by itself, is nothing else than that unity of act (at once, as such and without need of sense, known to understanding) by which understanding is able internally to affect any sense-complex that may be given to it—subject, of course, to the general perceptive form. Said act, therefore, under the designation of a *transcendental synthesis of imagination*, is exerted by understanding on the passive subject of which it is a faculty; and so we rightly say that the inner sense is by these means affected. Apperception (with its synthetic unity) is so far from being identical with internal sense, that, rather, as source of all synthesis, it acts (under the name of the categories) on the complex of perceptions generally (and so on objects generally), in antecedence of all sense-perception whatever. While inner sense, again, is the mere form of perception, but without power of conjoining the particulars given in it, and still, consequently, without anything that can be called a certain actual definite perception. That, something that is *a* perception and distinct, is only possible through the consciousness of the determination of inner sense by the transcendental action of the imagination (the synthetic action of understanding on inner sense), which I have called the figural synthesis.

This we see, too, always in our own selves. We cannot think a line without in thought drawing it, or a circle without so describing it, or the three dimensions of space without conceiving three lines perpendicularly to meet each other in the same point, or time itself without having regard, in that we similarly draw a straight line (which shall be the external

figurate representation of time), merely to the act of synthesis in the complex, whereby we successively determine inner sense, and whereby also we observe the succession of this determination in sense. Motion, as act of the subject (not as determination of an object),[1] consequently the synthesis of the complex in space when we abstract from space itself and regard only the act whereby we affect the inner sense, but still as in accordance with its form, is what gives rise to the very notion of succession. Understanding, therefore, does not just *find* in inner sense such synthesis of the complex implied, but, on the contrary, *produces* synthesis by *affecting* sense. But how the ego that thinks itself can, as regards the ego that perceives itself, be different from it (for an understanding that should at once *perceive* itself, is conceivably possible), and yet, at the same time also, as being the same subject, all one with it—how, therefore, I can say, I, as intelligence and *thinking subject*, cognise myself as *thought object* so far as, in addition to thought, I am given in *perception*, only, like other phenomena, not as I am before understanding, but as before sense I *appear* to myself—all this has no more and no less difficulty than how I can be to myself an object at all, an object, that is, of perception and inner sense-consciousness. But that it actually must be so may (space being assumed as merely pure form of the appearances of outer sense) be made clear by considering that, time being no object of external

[1] Motion of an *object* in space is no consideration of any pure science, and, consequently, not even of geometry; for that something moves can only be known from experience, and not *a priori*. But motion, as *described* in space, is a pure act of the successive synthesis of the complex in outer perception, through instrumentality of productive imagination, and belongs, therefore, not only to geometry, but even to transcendental philosophy.—K.

perception, we cannot otherwise represent it to ourselves than by the image of a line, and that, too, only so far as in thought we draw it; for without this expedient we should be unable to conceive the unity of the dimension of time. Evidence to the like effect is this, that, as regards duration in time, or relative position in time, we must, for realization of conception in such cases, have recourse to the fact of change in external things. Of all the conclusion, therefore, is that we must order the determinations of inner sense as sense-presentations in time, in precisely the same way in which we order those of external sense in space; and that, consequently, if of the latter we admit that through them we know objects only so far as we are externally affected, we must no less admit of inner sense that through it we perceive our own selves only as we are by our own selves internally affected. That is, we must admit that, so far as concerns internal perception, we cognise our own subject only as sense-appearance, and not according to what it is in itself.[1]

[1] I do not see how there should be so much difficulty in conceiving that inner sense may be affected by our own selves. Every act of attention is an example of the fact. In it understanding always determines the inner sense (in accordance with the combination that is the subject thought) into that inner perception which corresponds to the complex in the synthesis of the understanding. How much the mind is commonly affected in this, every one will be able to perceive in himself.—K.

I cannot help remarking here that, in the above (text) Kant has distinguished by stars one of the most signal examples possible of his very worst writing. Not only do the two last sentences occupy fully a whole page with the most spider-like sprawl of helplessly-intricate clauses, but what precedes them is even disfigured by actual errors, both verbal and syntactical. One is apt to surmise that Kant never stopped for completion of his thought before he put his pen to paper; but that he thought as he wrote. So it was that factor after factor and bearing after bearing interposed only *by the way;* suggesting thus modification after modification, condition after condition, and, consequently, clause after clause. To think, too, that what is wanted to be said is so simple that a single sen-

§ 25.

On the other hand, in the transcendental synthesis of mere *mental* consciousness as such (that is, in the original synthetic unity of apperception), I am aware of myself, not as I appear to myself, nor yet as I am in myself, but only as that I am. *This cognition is a thought, not a perception.* But, now, for an objective recognition of myself, there is required, besides the act of thought necessary for the reduction of any possible perceptive complex to the unity of apperception, a particular mode of perception, as well, *in supply of a complex.* Thus, then, my own being is not mere appearance (and still less mere blind show). This, my being, however, can be determined only as in regard of the particular manner in which the complex presented for my synthesis is given in inner perception, and always, at the same time, as in accordance with the native form of inner sense.[1] In this

tence—but see Commentary. Kant himself refers to § 6; a much better reference would be § 8, II.

The errors are these. Under the stars, second paragraph, fourth sentence, there is an omission, or the punctuation and an "auf" are wrong. Third paragraph, second period, the writer's ear has put a terminal clause, an "Acht haben," which properly refers half way up; or the references of "ohne," and "indem," and "Acht haben" are all wrong. By-and-by, Rosenkranz has a "Wahrnehmungen" which were better singular.

[1] The *I think* expresses the act to determine my being. The *fact* of my being is thereby, therefore, already given; but how I shall determine *what* it is, or how I shall realize in myself the constituent complex of cognisable units that is peculiar to it—this is not thereby given. To that there belongs self-*perception*, and perception basally implies an *a priori* given form (time), which is sensuous and attaches to the receptivity of my sentiency. Should I not have, now, further, another self-perception by which what is *determinant* in me (of whose spontaneity as such I am only as yet supposed to be conscious) is given before the act of determining, in the same way as what is *determinable* (sentient) is given by time—in that case I cannot determine my existent nature (as that of a self-active being): I only perceive the spontaneity of my thinking, that is, of the *determining;* and my constituent existential nature remains

way, consequently, I have no objective perception of myself as I am, but only as I, through sense, appear to myself. The consciousness of one's self is still, therefore, far from being an objective recognition of one's self, notwithstanding presence of all the categories which compose the thinking of an object (as such) through synthesis of some given perceptive complex in an apperception. For perceptive cognition of an object different from myself, I require, besides the general thinking of an object in the categories, a perception as well, whereby to determine, or give filling to, said general notion (in the categories). In the same way, for objective recognition of myself, I require, besides consciousness, or besides the fact that I *think* myself, as well a perception of the complex in me whereby to determine, or give filling to, that bare thought. I exist, therefore, as an intelligence which is only conscious to itself of its bare synthetic function, but, for a complex to act on, is subjected to a limiting condition,[1] named inner sense. So situated, such an intelligence can realize said synthetic function on or in a perception, only in accordance with relations of time, relations, consequently, which lie quite outside of the notions proper of understanding; and can, therefore, objectively recognise itself only as, in regard of a perception which cannot be intellectual and given by the understanding, it merely *seems* to itself, and not as it would perceive itself, were its perception intellectual.

always only sensuous, or determinable as that of a sense-appearance. It is the spontaneity, all the same, that empowers me to name myself an *Intelligence*.—K.

[1] "Verbindung" here is a mistake for *Bedingung*.

§ 26. Transcendental Deduction of the general possible *empirical* Action of the Categories.

In the *metaphysical* deduction, the *a priori* origin of the categories was substantiated by their complete agreement with the general logical functions of thought (§ 10). In the *transcendental* deduction, again (§§ 20, 21), there was established the possibility of these categories as *a priori* cognitive elements in objects of perception as perception (perception proper, general, not yet special). What is now, then, to be explained, is the possibility of an *a priori* cognition (through categories) of actual objects *of special sense*, and not as concerns their mere general perceptive form (the successions of time and space), but in reference to the laws of their synthesis. Such *a priori* synthesis were, as it were, a prescribing of law to nature, and even a making of it possible; for, otherwise, it were inexplicable how everything whatever that is an object of our very senses must stand under laws, which have their source only *a priori* in the understanding itself.

I remark, first, that by *synthesis of apprehension* I understand the setting together of the various elements in an empirical perception, whereby empirical consciousness of such perception (still as sensible appearance) is made possible.

A priori we have forms of external as well as internal sensuous perception (in space and time), and the synthesis of apprehension must always conform to these, for it can be realized only in that form. But space and time are conceived to be perceived not merely as *forms* of sensuous perception, but as themselves *perceptions* (objects implying a complex), and, consequently, as already *a priori* possessed of the de-

termination of unity of complex (see Trans. Æsthet.)[1] There is, therefore, *unity of synthesis* of the complex (whether as external to us or internal)—that is, a *conjunction*, to which all that can be perceived as determined in space or time must submit—already *a priori* given (as synthetic condition of all apprehension), at the same time *with* (not merely *in*) these perceptive forms or perceptive objects. This synthetic unity, however, can be no other than that of the union of the manifold of an inherently given perception (the *a priori* general one), in an original consciousness, conform to the categories, and only *applied* to our sensuous perception. All synthesis, consequently, whereby even sense-perception becomes possible stands under the categories; and as experience is a cognition through connected sense-perceptions, the categories are conditions of the possibility of experience, and have, consequently, an *a priori* application to all objects of experience.

* * * * *

Suppose, for example, I observe the empirical perception of a house (the object, house) by apprehension of its complex, there is presupposed under it

[1] Space, as an *object* (an actual requirement of geometry), involves more than a mere perceptional form; *synthesis* of complex, namely, in obedience to the form of sense, and into a *perceivable* cognition, in such wise that the *perceptive form* presents merely the complex, while the *formal perception*, on the other hand, presents the unity. This unity I had accounted in the Æsthetic merely to sense in order only to signalize that it precedes any *notion*, not but that it presupposes a *synthesis*, which does not belong to the senses, but which at the same time conditions the very possibility of notions as in application to space and time. For as through it (understanding so determining sense), space and time are as perceptive objects originally just *given*, so the unity of perception implied belongs *a priori* to space and time themselves, and not to any *notion* (as category) of the understanding (§ 24).—K.

This unity, which precedes any individual notion, is, of course, that of the *first* synthesis.

the necessary unity of space and of outer sense generally, and I picture, as it were, its shape, in accordance with this synthetic unity of the complex in space. But, leaving out of view the form of space, precisely the same synthetic unity is to be found in the understanding as the category of homogeneous synthesis in perception generally (the category of quantity), to which, therefore, said synthesis of apprehension (the thing seen) must completely conform.[1]

Or suppose I observe the freezing of water, what I apprehend are two states (liquid, solid) such that they stand towards each other in a relation of time. But I picture necessary synthetic unity of the sense-complex *in* the general underlying element of time, and without this synthetic unity said relation (of ruled place in time) would not be given as a single determinate perception. But now, leaving time out of view, this synthetic unity, as *a priori* condition under which I interconnect generally the complex of perception, is the category of cause—a category by means of which, when applied to contributions of sense, I determine all that happens into the form of a ruled relation in time. And therefore apprehension in the case of any such occurrence, consequently this (occurrence) itself, as regards possible perception, stands under the *notion of the relation of effects and causes*, and so in all the other cases.

* * * * *

[1] It is proved in this way that the synthesis of apprehension, which is empirical, must accord with the synthesis of apperception, which is intellectual and represented by the *a priori* category. It is one and the same mental spontaneity which, there as imagination, and here as understanding, effects synthesis in the complex that may be before perception.—K.

In the second line of the above paragraph, Rosenkranz has, for *apprehension*, the misprint "Apperception," an error which we saw before in § 24.

Categories are notions which *a priori* prescribe laws to sense-appearances, and consequently to nature as the totality of such (*natura materialiter spectata*); and the question is, as they cannot be derived from nature nor subject themselves to it as their pattern (for then they would be merely empirical)—the question is, how are we to understand this, that nature must subject itself to them. In a word, How can categories *a priori* determine the actual syntheses of objects in nature—instead, rather, of being derived therefrom? Here is the solution of this enigma:

It is not at all[1] more surprising how laws of objects in nature should of necessity agree with the understanding and its *a priori* forms (its functions, namely, of synthesis in the varieties of the sense-complex), than how these objects themselves should of necessity agree with the *a priori* form of sense-perception. For laws just as little exist in the objects (mere affections of sense), unless only relatively to the subject (in which these inhere) so far as said subject has an understanding,—just as little as objects exist *in themselves*, and not relatively only to the subject so far as the subject has senses. Rule would necessarily accrue to things in themselves from themselves, and independently of any understanding that might cognise them. But our objects, being only sense-appearances, represent merely such things as, for what they are in themselves, are wholly unknown. And, as such, plainly, neither can their connexions stand under any law but that which the connecting understanding prescribes for them. But what connects any complex in sense-perception is imagination; and imagination, depending on sense for the complex of apprehension, is equally dependent on understanding for the unity of

[1] Instead of *um*, Rosenkranz has here the misprint "*nun*."

its own intellectual synthesis. Inasmuch, now, as all possible perception depends on the *synthesis of apprehension*, which (empirical) synthesis itself, for its part, depends on the transcendental synthesis, and consequently on the categories, so all possible perceptions, consequently all that can ever come to be a constituent of empirical consciousness—and that is all objects of sense in nature so far as their connexion is in regard—must stand under the categories. Nature (merely as such) depends, for its necessary subjection to law and order, on the categories as the original source and ground of that law and order, in reference to which latter nature is as *natura formaliter spectata*. But to more laws than those on which a nature in general (as law and order of sense-appearances in space and time) rests, the competence of even the purest understanding does not extend as regards prescription *a priori* of laws to such objects through mere categories. *Special* laws, as concerning only what is empirically determined, cannot be completely derived from the categories, though standing in a body under them. Experience must, in addition, be applied to in regard of such. But of experience as experience, and of what can be known as an object of it, said *a priori* laws alone (the categories) supply instruction.

§ 27. Result of this Deduction of the Categories.

We cannot think an object without categories; we cannot cognise any object thought, unless through perceptions which correspond to these notions. Now all our perceptions are in sense, and such cognition, so far as the object of it is *given*, is empirical. But empirical cognition (or recognition—perception) is

experience. Consequently there is no objective cognition *a priori* possible to us, but one solely of objects of possible experience.[1]

But such cognition, though confined merely to objects of experience, is not *therefor* all borrowed from experience. On the contrary, even such cognition has elements which originate *a priori* within ourselves; firstly, the pure perceptions (time and space), namely, and, secondly, the pure notions of understanding (the categories). Now, there are only two ways in which we can think a necessary agreement of experience with notions of objects in it: either experience makes these notions, or these notions make experience, possible. The one alternative is not true of the categories (*pure perception* apart); for they are *a priori* notions, and consequently independent of experience (the assertion of an empirical origin would be a sort of *generatio æquivoca*). There remains, therefore, only the second alternative (as it were a system of the *Epigenesis* of pure reason): that the categories, on the part of the understanding, namely, possess the grounds of the possibility of all our experience. How, however, they make experience possible, and what principles of this possibility they furnish in their application to the intimations of sense,

[1] In order to preclude possible premature objection of questionable consequences to be apprehended from this proposition, I will only remark that, *in thinking*, the categories are not necessarily under restriction of the conditions of our sense-perception, but possess, so far, a quite unlimited field. It is only the *perception* of what we think, the determination of it as an object, that requires elements of perceptive sense. Even without this latter the mere thought of some certain object may have always its own results of true and authentic application in the reasonings of the subject. Such application, however, as it is not always directed to actual determination of the object, to actual objective cognition, but rather to determination of the subject and its volition, is here not yet in place to be discussed.—K.

will be further explained in what follows on the transcendental function of judgment.

Between the two ways named, one might conceivably propose a middle-way: namely, that the categories are neither spontaneously-thought first principles *a priori* of our objective cognition, nor, again, that they are borrowed from experience, but that, implanted in us with our very existence, they are subjective germinal elements, or pre-capacities for thinking, which have been so fashioned by our Maker as in their function accurately to harmonize with the laws of nature which obtain in experience (a sort of *preformation-system* of pure reason). But, besides that in such an hypothesis it is impossible to see any end to presuppositions of pre-established potentialities of future judgments, this, as in opposition to the said middle-way, would be decisive: namely, that the categories, in such a case, would want that *necessity* which essentially belongs to their very notion. For the notion cause, for example, which affirms, under a presupposed condition, the necessity of a certain result, would be false, if it were founded only on an arbitrarily implanted subjective necessity in the connecting of certain empirical facts conformably with such rule of relation. I should not be able to say, The effect is united *in the object* (that is, necessarily) to the cause, but only, I am so made that I cannot otherwise think these facts than as so and so connected. But that is just what the sceptic especially wants. For then all our knowledge, through any supposed objective validity in our judgments, would be mere illusion. Neither, in that case, would there be wanting those who would not admit for themselves said subjective necessity (matter of *feeling* as it must be). There could be no dispute

at least with any one as regards what would merely depend on how he was subjectively organized.

A Brief Idea of this Deduction.

It is the exposition of the pure notions of the understanding (and with them of all *a priori* theoretical objective cognition) as principles of the possibility of experience,—of these, again, as *determination* of sense-appearances in space and time *generally*,—of these, lastly, from the principle of the original synthetic unity of apperception as form of the understanding in a connecting reference to space and time, and to them, for their parts, as original forms of sense.

* * * * *

Thus far I have considered it necessary to proceed by paragraphs, inasmuch as we have been hitherto occupied only with the elementary notions. Now, however, that it is their application which is to be made conceivable, our exposition shall, without paragraphs, be in continuous connexion.[1]

Book II.—The Analytic of Judgments.

General Logic is built on a frame which quite accurately coincides with the classified table in distribution of the higher cognitive faculties: Understanding, Judgment, Reason. Its analytic treats, therefore, of Notions, Propositions, and Syllogisms, in exact accordance with the order and functions of the intellectual powers named; of which it is further to

[1] Beginning of § 27, "Anschauung" should be *Anschauungen;* next paragraph, the last parenthetic hook (after "Vernunft") is wanting; last sentence, a "da" omitted (in edn. Rosenkranz).

be remarked, indeed, that they are usually collectively comprehended, in a wide sense, under the common designation of the understanding simply.

This merely formal logic, now, abstracting from all matter of cognition (whether pure or empirical), and occupying itself simply with the form of thinking (the form of *discursive* cognition), will be manifestly competent to supply, in its analytic, a canon for *reason* as well. For the form of reason must have its own fixed prescript which, without consideration of the contained matters specially concerned, will be capable of being *a priori* recognised through merely analyzing the processes of reason into their constituent moments.

Transcendental Logic, again, involving a certain contained matter (in its pure *a priori* cognitions), to which matter it is restricted, cannot follow the same rule. Nay, it will be found that the transcendental application of *reason* is not in any respect objectively valid, and consequently that it does not belong to a logic of truth (an analytic) at all, but that, under the name of *transcendental dialectic*, it takes the place of a special division in the ordinary formulary of the schools only as a logic of false show.

Understanding and judgment, accordingly, have, for their parts, each its own canon of objectively available use in transcendental logic, and are consequently comprehended in the analytic. But, on the other hand, *reason*, for its part, in any attempts it makes to decide something *a priori* of objects, and so extend our knowledge beyond the limits of possible experience, becomes, it will be found, utterly *dialectical:* its mere mock determinations, therefore, were altogether out of place in a canon, and only a canon has place in an analytic.

The analytic of judgments (or propositions), therefore, will only provide a canon for the judging faculty. This canon, again, will instruct the faculty how to apply to sense-matter the categories in their quality as possessing the condition (or principle) towards *a priori* rules. I shall avail myself, therefore, in prosecuting an analysis of the propositions proper of the understanding, of the designation *doctrine* of judgment, whereby the business involved will be more exactly indicated.

Introduction.—Of Transcendental Judgment Generally.

If understanding be considered the faculty of rules, judgment will be the faculty that *subsumes* under rules, the faculty that distinguishes whether something stand (*casus datæ legis*) under a given rule or not. General logic neither has, nor can have, any prescripts for judgment. For, abstracting from all *matter* of cognition, there can remain to it no business but the setting out analytically of the mere *form* of cognition in terms, propositions, and syllogisms, and the production, consequently, of rules in the general use of the understanding that are simply formal. Evidently, then, if logic sought, in such circumstances, to prescribe *how* we should subsume, *how* we should discern whether something stood under its rules or not, it could only do so through yet another rule. But this rule, again, and just because it is a rule, demands anew an instructing of judgment, and hence it appears that, for its part, the understanding is capable of being instructed and qualified by rules, whereas judgment, again, is but a special talent that may indeed be exercised but not taught. Judgment, in point of fact, constitutes what is specific in so-

called mother-wit, the want of which cannot be supplied by any schooling; for let schooling amply offer, or even cram a limited understanding with rules borrowed from another, still the ability rightly to apply them must be the pupil's own. No rule whatever that might be supplied him with this intention would, in default of the natural gift, be safe from misuse.[1] A physician, therefore, a judge, or a statesman may have in his head many fine pathological, jurisprudential, or political rules—may have them in his head to such a degree, indeed, as to be actually a profound teacher of them, and yet he shall easily blunder in the application of them, either because he wants natural judgment (not understanding as faculty of rules), and, though he can very well understand the universal *in abstracto*, he is unable to decide of the particular *in concreto* as a case in point, or because, it may be also, he has not been sufficiently exercised in examples or inured to actual practice, for the formation of such a judgment. For this, in that reference, is precisely the one sole and great use of examples: they sharpen the judgment. As regards precision and exactitude of *understanding*, they are commonly, rather, prejudicial to it, inasmuch as it is only rarely that (as *casus in terminis*) they adequately answer the condition of the rule, and because also they frequently weaken the effort of the understanding to see into

[1] Want of judgment is what is properly called dulness or stupidity, and for such an ailment there is no cure. An obtuse or restricted capacity, wanting nothing but the due degree of understanding and the notions proper to it, may very well be educated—educated even up to learnedness; but the want (that of the *Secunda Petri*) will still be there. And thus it is that it is not at all unusual to meet very learned men who, even in their very learning, not infrequently betray said irremediable failing.—K.

rules according to their sufficiency in general and independently of the particular circumstances of experience—inducing in this way a habit at last of using universal rules rather as formulæ than as principles. So it is that examples are the go-cart of the judgment which he who wants the natural talent of it can never let go.

But, though general logic has no prescripts for judgment, transcendental logic is quite otherwise. Nay, it would seem the precise business of the latter just, through rules, to guide and safe-guard judgment in its intromissions with the pure understanding. For philosophy appears not at all required for extension of understanding in pure cognition, or as *doctrine*, but rather misplaced; for, despite all attempts hitherto, little or no ground has been won with it so; but as *critique or criticism*, in order to preclude the errors of judgment (*lapsus judicii*) in regard of the few pure notions of the understanding possessed by us—in that capacity (though the gain is but negative) philosophy, and with all its sharp-sightedness and power of proof, is specially in request.

Now this is the peculiarity of the transcendental philosophy, that, besides the rule (or rather the universal condition to rules) which the category represents, said philosophy can at the same time *a priori* notify the case on which the rule is to be applied. The reason of this advantage over all the other theoretical sciences (mathematics alone excepted) lies in this, that the notions on which transcendental philosophy is engaged are such as to connect themselves *a priori* with objects. It is not *a posteriori*, then, that such notions can have their objective applicability proved; for they possess a dignity beyond that standard. In their case, rather, there must be given along with themselves (at least in

general but adequate characterization) the actual conditions under which objects are to be offered them; or else they would be without *matter*, consequently bare logical *forms*, and not pure notions of understanding.

This transcendental *doctrine* of judgment, now, will comprise two chapters: the first treating of the sense-conditions under which the categories can be alone applied (of the schematism, therefore, of pure understanding); and the second of the synthetic propositions (judgments) which *a priori* result from the categories under these conditions and underlie all other *a priori* cognitions; that is, of the ground-propositions of the pure understanding.

Chapter I.—The Schematism of the Categories.

In every subsumption of an object under a notion the former must be homogeneous with the latter; that is, the notion must be what is represented in the object which is to be subsumed under it; for the very expression, an object is subsumed under a notion, means that. Thus the empirical notion of a plate is homogeneous with the pure geometrical notion of a circle, seeing that the roundness which is implied in the former is in the latter visible (objective).

But, now, the pure notions in comparison with empirical perceptions (or say, rather, perceptions of sense) are quite heterogeneous, and (the word being used strictly) cannot be possibly perceived. *How*, now, is the subsumption of these under those—how is application of categories to mere affections of sense possible? for nobody will say that the categories (*e.g.*, causality) can be sensuously seen or felt and are included in the sense-affection. This so natural and important question is precisely the reason now, which

makes a transcendental doctrine of judgment necessary—to demonstrate the possibility, namely, of introducing categories of the understanding into the affections of sense. In all the other sciences, because in them the notions through which the object is thought are not so heterogeneous, not so different from those which attend said object as given *in concreto*, it is unnecessary to resort to any special exposition of the relative application.

In this reference, now, it is evident that what is wanted is a *tertium quid*, which, homogeneous on this side with the category and on the other with sense, will mediate the connexion of the one with the other. This mediating agent, in a word, while wholly pure or non-empirical, must, on one side, be intellectual, and, on the other, sensuous. Such an agent we shall name *transcendental schema.*

The category is a principle of the pure synthetic unity of a complex, no matter what. Time, as formal condition of any complex in internal sense, and consequently of all connexions in consciousness, implies, represents, or is *an a priori complex of pure or non-empirical perception.* A transcendental determination of time, then, is, with regard to the *category* which may be supposed to act in determination of its unity, so far homogeneous: like the latter, namely, it is universal and depends on an *a priori* law. But, on the other side, again, it is so far homogeneous with *sense*, as time is an element in every actual empirical complex. Application of category to ingredients of sense, therefore, will be possible through that transcendental determination of time which, as schema of category, mediates the subsumption of the latter under the former.

After what has been shown in the deduction of the

categories, is is to be hoped that no one will have any difficulty with the question, whether the categories are of merely empirical or whether they are also of a transcendental value; that is, whether they are of *a priori* application to sense solely as conditions of a possible experience, or whether, as conditions of the possibility of things at all, they may have their application extended to objects in themselves (without any restriction to our sensibility). For we saw there that notions are quite impossible and meaningless unless an object be given either to them themselves or at least to the elements of which they consist, and consequently that they do not apply to things in themselves (without respect of whether or how they may be given us). We saw, further, too, that the only way in which objects are given us is by modification of our sensibility. Lastly, we saw also that pure *a priori* notions must presuppose, besides the function of understanding in the category, formal conditions of sense as well (particularly inner sense), which conditions constitute the universal proviso under which alone it is possible to apply a category to any object. We name this formal and pure condition of sense, to which in its action the category is restricted, the schema of this category, and the procedure of understanding with these schemata the schematism of pure understanding.

The schema is always in itself only a product of imagination; but, as the synthesis of the latter then has not in view any single perception, but only the unity of a general process in determination of sense, the schema is not to be confounded with the *figure* or *image*. If I set down five points the one after the other thus, ..., what I have is a picture or representation (figure, image) of the number five. But if

I think just *a* number, any number at all, let it be five or let it be a hundred, then this thinking is rather the conception of a method towards the picture of some sum under a certain notion than this picture itself, which picture, in this latter case, it would hardly be possible to realize and compare with the notion. This idea now of a general process of imagination for providing a notion with its correspondent picture or image, I call the schema to this notion.

In effect there underlie our pure sense-notions not pictures of the objects, but schemata. There can never be an adequate picture for the notion of a triangle in general. For it would never attain to that *generality* which enables the notion to hold good of any triangle, right-angled, oblique-angled, etc., but would be limited always to a part of this sphere. The schema of the triangle can never exist anywhere but in thought, and signifies a rule of the synthesis of imagination in regard of certain pure figures in space. But still less does any object of experience, or picture of it, come up to the notion. This last, rather, directly refers to the schema of imagination as a rule for the determination of our sense-perception in agreement with a certain general idea. The notion, dog, signifies a rule in accordance with which my imagination can figure to itself *generally* the form of a certain four-footed animal, without being restricted to any single individual shape as offered me in experience, or even to whatever possible image I may construct *in concreto*. This schematism of our understanding, in regard of objects of sense and their mere form, is a hidden art in the deeps of the human soul, the veritable trick of which we shall hardly ever come to detect in nature and openly display. We can only say this much: the picture (figure, image) is a pro-

duct of the empirical faculty of productive imagination; while the schema (of sense-notions, as, for example, of the figures in space) is a product and, as it were, a monogram of pure imagination *a priori*, by and according to which pictures become first of all possible, which pictures, however, must be conjoined with the notion only through the schema producing them, and with which in themselves they never wholly agree. The schema of a category, again, is something that cannot be brought into any image, but is only the pure synthesis, in agreement with a rule of unity through notions generally (which notions are expressed in the categories), and is a transcendental product of imagination, which concerns the determination of inner sense generally according to conditions of its form (time) in regard of all cognitions, so far as these, under the unity of apperception, are supposed *a priori* to cohere in a one notion.

Not to stop now for the long and tedious analysis of what is required for transcendental schemata of categories in general, we shall rather simply set them down in the order of, and in agreement with, these categories.

The pure picture of all magnitudes (*quantorum*) in outer sense is space; but that of all objects of sense generally, time. The pure *schema* of *magnitude* (*quantitatis*), as notion of the understanding, again, is *number;* and number is a cognition which represents the successive addition of homogeneous unit to homogeneous unit. Number, then, is nothing else than unity of synthesis in a complex of homogeneous perception in general—by this, namely, that I generate time itself in the apprehension of the perception.

Reality in the category is what corresponds to sensation; any sensation, as such: that, then, the notion

of which in itself indicates a beingness or fact of some kind or other in time. *Negation* is that the notion of which represents a non-being in time. The distinction of the one from the other, therefore, lies in the difference of a time filled from the same time void. As time is only *form* of perception, or of objects as affections of sense, what in these, consequently, corresponds to the sensation may be called the transcendental *matter* (reality) of all objects conceived as things on their own account. Now every sensation has a degree or magnitude, whereby it fills more or less the same time (that is, inner sense in regard of one and the same perception of an object), till it disappears in nullity (nothing, or negation). There is, therefore, a relation or connexion between reality and negation, or a transition, rather, from the one to the other, which transition exhibits every reality as a quantum. Accordingly, the schema of reality (as quantity of something so far as it fills time) is just this same continuous and uniform generation of filling in time, whether we suppose a certain degree of sensation progressively to ascend from nothing in time or regressively to descend to it.

The *schema of substance* is the persistence of the *reale* in time; that is, the conception of this *reale* as a substratum of empirical determination in time taken quite generally, which substratum persists, therefore, while all else changes. (Time itself does not fade away and vanish, but only the existence of the mutable that is in time. To time, therefore, as itself immutable and permanent, there corresponds in the presentation to sense the *immutabile* of existence, that is, substance: only as referred to it can succession and co-existence of sense-presentation be determined in regard of time.)

The schema of cause and the causality of anything

generally is the *reale* on which, whenever it is, something else always ensues. It consists, therefore, in the succession of the elements in the complex, so far as this succession is subjected to a rule.

The schema of community (reciprocity), or of the mutual causality of substances in regard of their accidents, is the co-existence of the determinations of the one with those of the other according to a universal rule.

The schema of possibility is the agreement of the synthesis of several ideas with the conditions of time generally (as, for example, in the reference that a thing and its reverse, or contrary, cannot both be at one and the same time): it is the determination of a thing as conceivable at any time.

The schema of actuality is existence in a determinate time.

The schema of necessity is the existence of an object at all times.

We see here, then, that the schema of every category refers to time: as that of quantity to the bringing to pass synthesis of time itself in the successive apprehension of an object; that of quality to the synthesis of sensation (sense-perception) with the conception of time, or to the filling of time; that of relation to the connexions of the sense-units in each other's regard at any time (that is, as in accordance with a rule of the determination in time); and, lastly, those of the three modalities, to time itself, in regard of whether and how an object belongs to it. The schemata, therefore, are nothing but *a priori* time-determinations on rules: these, in the order of the categories, successively refer to time-range, time-filling, time-order, and time-complexion, as in regard of all possible objects.

From this it is clear that the schematism of the understanding as produced by the transcendental synthesis of the imagination has no other end than the unity of every complex of perception in the inner sense, and, in this way, indirectly, consequently, the unity of apperception as *function* correspondent to inner sense (which, for its part, is receptivity or *affection*). The schemata of the categories, therefore, are the true and only conditions for providing these with an application to objects, and, consequently, with meaning; and the categories are in the end, therefore, of no other use than a possible empirical one: they serve merely for this, namely, To subject, through grounds of an *a priori* necessary unity (towards the necessary conjunction of every consciousness in an original apperception), presentations of sense to universal rules of synthesis, and thereby fitly exhibit them in the complete interconnexion of an *experience.*

All our objective cognitions, however, are only to be found within the sphere of possible experience; and it is in the universal application to possible experience that transcendental truth consists—the transcendental truth which precedes, and only makes possible, all empirical truth.

It is self-evident, however, that, if the schemata of our sensibility first of all *realize* the categories, they, at the same time, also, restrict them—to conditions, namely, which, as in sense, are outside of the understanding. So it is, therefore, that the schema is only the *phenomenon*, or the *sensuous* notion, of an object, in agreement with the category. (*Numerus* is *quantitas phænomenon; sensatio* is *realitas phænomenon; constans et perdurabile rerum* is *substantia phænomenon;* and the schemata of modality are, in the same way, *possibilitas*,

necessitas, etc., *phænomena*.) Now, if we omit a restricting condition, we certainly appear to amplify what notion was subjected to the restriction; and the categories, it is true, *may*, in this way, be applied, without conditions of sense, and in their own pure import alone, to things as they *are*, whereas the schemata of the categories foreshadow things only as to sense they *appear*. That is, the categories *may* have a significance bestowed upon them that is in independence of all schemata and of much wider reach. In effect, the categories certainly do possess, even with removal of every condition of sense, a certain function (only logical, however) of mere unity in ideas, but for which ideas there is no object, and neither, consequently, any application capable of furnishing a notion that has any objective bearing. Thus, for example, substance, with omission of the reference to something sensuously permanent, would not signify anything else than a something that may be thought as subject, and not possibly as at the same time predicate. But of such conception I can make nothing more than that: it does not enable me to know what actual properties that thing shall have which is to be such ultimate subject. Without schemata, therefore, categories only function notions for the understanding, but exhibit no object. *That* (an object) comes to them from sense which *realizes* understanding in so *restricting* it.

Chapter II.—System of the Ground-Judgments of Pure Understanding.

We have considered, in the preceding chapter, transcendental judgment only as in respect of the general conditions (schemata of sense) under which

alone it is competent for it to apply the categories in production of synthetic propositions. Our business now is to exhibit, in systematic connexion, what judgments understanding, under such critical proviso, actually *a priori* creates; and hereto, without doubt, our categorical table will supply the natural and sure clew. For it is precisely the action of the categories, as on possible experience, that must effect all pure, or *a priori*, objective cognition; and it is precisely their relation to sense that is motive to the complete and systematic exposition of all the transcendental ground-judgments.

Ground-judgments *a priori* appropriate this name not merely because they are the grounds of other judgments, but because they themselves have no further or more general grounds. This circumstance, for all that, does not exempt them from the obligation of proof. For although, in their case, it were impossible to carry any proof *objectively* further, seeing that they themselves, rather, are to their own objects the ultimate grounds of cognition, still this is no prejudice to the possibility of a proof from the *subjective* pre-conditions of objective cognition generally. Nay, such proof as this latter is even indispensably necessary, as without it our position would bring with it the greatest suspicion of a mere surreptitious assertion.[1]

Secondly, we shall restrict ourselves to those ground-judgments alone which immediately spring from the categories. The principles of the transcen-

[1] There are grammatical slips in the middle of the above paragraph and the end of the preceding one. I think I have remedied both according to the author's intention. Rosenkranz makes an *aller* "alle" in the one case, and inserts a "man" in the other. The "man" does not quite cure the sense, and I do not think it right; but the "alle" leads to nonsense.

dental æsthetic, bearing as they do on space and time as conditions of the possibility of things:—in that they are affections of sense; the restriction of said ground-judgments themselves, in that they are, namely, not to be applied to things in themselves:—these are considerations already behind us and apart from our immediate special inquiry. Neither do mathematical propositions belong here, for they depend on perception and not on any pure notion of understanding. Still, a consideration of the *possibility* of these will necessarily have place here, because they constitute withal synthetic judgments *a priori*—not, indeed, to prove their correctness and apodictic certainty, which is no requisite for them, but only to deduce and make conceivable the *possibility* of such evidently *a priori* cognitions.

We shall have to speak at the same time of the principle of analytic judgments, and as in contrast to our theme proper, the synthetic ones, because precisely this contrast will free the theory of the latter from all misunderstanding, and distinctly exhibit them in their peculiar nature.

Section 1. Of the Ultimate Principle of all Analytic Judgments.

Of whatever import our cognition may be, and whatever bearing it may have on its object, the universal, though but negative, condition of all our judgments is this, That they do not contradict themselves; or else, in themselves, and without consideration of the object, they are null. Still, even should there be no contradiction in our judgment, it is quite possible for ideas to be united in it which are not in the object, or that there should be in support of it no ground given whether *a priori* or *a posteriori*. A

judgment, therefore, that is itself quite free from any inner contradiction, may still be groundless or false.

This, then, That there cannot be joined with anything a predicate which contradicts it, is known as the *proposition of contradiction.* It is a universal, but only negative criterion of truth. It has its place, however, only in logic, inasmuch as it applies to cognitions merely as cognitions (their *matter* apart), and declares only, contradiction altogether destroys and subverts them.

A positive use, however, is still possible for it. It is not necessary, that is, to regard it as only negative of (self-contradictory) falsehood and error;[1] it may really be applied as affirmative of truth. For, in the case of a judgment that is *analytic*, let it be negative or let it be affirmative, its truth is always sufficiently within the determination of the principle of contradiction. What, namely, in the cognition of the object lies as notion, and is thought there—of that the contradictory is at all times legitimately denied; whereas the notion itself must be necessarily affirmed of the object, and just because its contradictory would contradict the object.

Hence it is that we must recognise the *proposition of contradiction* as the universal and perfectly adequate principle of every *analytic cognition.* Further, however, it is, as a criterion of truth, neither considerable nor applicable. For that no cognition can neglect it without self-destruction, in that regard it is certainly a *conditio sine qua non*, but not, nevertheless, a determinative ground of truth. In prosecuting, therefore, our business proper, which concerns only the synthetic part of cognition, we shall always be on the watch not to offend against this inviolable principle; but

[1] The "er" here, in Rosenkranz ("so ferne er"), were better *es.*

not to expect from it, at the same time, any light on what cognition concerns us.

There is, however, a version of this noted proposition, devoid, as it is, of all material content and merely formal, in which, without consideration and quite unnecessarily, a synthesis has been really mixed up. It runs thus: It is impossible for anything, at one and the same time, to be and not to be. This proposition, besides that the apodictic certainty in it (which should be evident of itself) is, in the word *impossible*, superfluously appended to it, manifests itself as under a condition of time. Its import is this, namely: A thing = A, which is something = B, cannot, at one and the same time, be non-B. But it can very well be both (B as well as non-B), one after the other. For example, a man that is young cannot at the same time be old, but he can quite easily be young at one time, and not-young, or old, at another. Now, seeing that it is logical only, the proposition of contradiction must not have its decisions submitted to considerations of time. Said version, therefore, is quite opposed to the scope of the proposition itself. The misconstruction is this. First of all we isolate, in the case of something, a predicate of it from the notion of it, and then, this very predicate we immediately conjoin with the opposite of the thing in question. The resulting contradiction, all the same, is not with the subject, but only with the predicate of it (as now synthetically conjoined with its opposite), and only then, moreover, when both predicates are applied at one and the same time. If I say that a man, who is unlearned, *is* not learned, I must add the condition of time, for he that is unlearned at one time can very well be learned at another. But if I say again, no unlearned man is learned, the proposition is analytic,

for the quality (the unlearnedness) constitutes, once for all, so far, the notion of the subject, and the negation enunciated is seen to be valid from the simple proposition of contradiction, without any necessity to add a condition of time. This too is the reason why I have (above) so manipulated the version of the proposition that the nature of an analytical judgment is clearly expressed thereby.

Section 2. Of the Ultimate Principle of all Synthetic Judgments.

To explain the possibility of synthetic judgments is no business of general logic, to which the very name need not be known. It is, however, what is of most importance in transcendental logic; nay, it is the sole interest of this latter, when the question is of *a priori* synthetic judgments, their conditions and extent of validity. For so it is that such logic reaches its object—determination, namely, of the extent and limits of pure understanding.

In an analytic judgment, I remain by the notion to reach the result. If affirmative, I only attribute to the notion what is already thought in it, and if negative, I only exclude from the notion what contradicts it. In synthetic judgments, again, it is required of me to turn from and leave the given notion in order to find, in relation with it, something quite else than was thought in it. Now, the relation here is not one of identity or contradiction; not such, therefore, that, in regard of it alone, the judgment itself, simply as it stands, can be seen into as true or false.

Assuming the case, then, that, if we would *synthetically* conjoin a certain notion with some other notion, it is necessary for us not to remain by the former,

but to leave it, and look about us elsewhere, it is evident that what we must find is a *tertium quid*, which shall effect the required synthesis of the two notions. What now, then, can possibly be this *tertium quid* that shall be medium for all *a priori* synthetic judgments? There is only one common element within which all our ideas are to be found, and that is internal sense, of which time (and *a priori*) is its form. The process of synthesis in our ideas, again, is the work of the imagination. And lastly, unity in synthesis of the ideas, synthetic unity, without which unity there cannot be a judgment, depends on functions of unity in the unity of apperception. The possibility of synthetic judgments, therefore, and of pure synthetic judgments (for all three are sources of *a priori* cognition), will require to be sought in these. Nay, such judgments will necessarily issue from these sources, if there is at all to be a cognition of objects which shall solely depend upon a synthesis of mental elements.

If a cognition is to have objective reality, that is, if it is to bear on an object, and have sense and meaning in it, the object itself must, in one way or other, be capable of being given. Without such object the notions are void; for, though we have thought through them, we have, in effect, through this thinking cognised or recognised nothing: we have only played with ideas. To give an object, again, when such object is not merely to be mediately supposed, but immediately placed before us in perception, is nothing else than to realize its idea in experience, either as actual or as possible. Even space and time, pure and non-empirical as these cognitions are, and certain as it is that they are set up absolutely *a priori* in the mind within, would, nevertheless, be devoid of objec-

tive truth, and sense, and meaning, were their application and necessity not actually demonstrated as in reference to the objects of experience. The very idea in consciousness of them is a mere schema, that refers itself ever to reproductive imagination, whose business it is to call up the objects of experience, without which objects they themselves (space and time) would have no meaning. And, without distinction, all notions are similarly situated.

The *possibility of experience*, therefore, is what gives objective reality to all our *a priori* cognitions. But experience rests on the synthetic unity of the sense-elements (the impressions, etc.), that is, on a synthesis according to notions of an object generally in elements of sense. Without this synthesis notionally towards an object, the contributions of sense would not even be perceptive cognition, but only a rhapsody of sense-impressions which would not cohere in any ruled context of a one thoroughly connected (possible) consciousness, nor, consequently, as assimilated into the transcendental and necessary unity of apperception. Experience, therefore, has principles for its form which underlie it as *a priori* ground. These, namely, are, for the impressions of sense, universal rules of synthesis, of which, as necessary conditions, the objective reality can always be proved in experience, nay, as in regard of the very possibility of it. Without such application, *a priori* synthetic judgments were completely impossible; for in that case they would be without a *tertium quid*—they could have no pure object, on which tried, the synthetic unity of their notions might exhibit objective reality.

Although, therefore, of space and of possible configurations in space on the part of productive ima-

gination, we really do *a priori* know so much in synthetic judgments, and without appeal to actual experience, yet such knowledge would be occupation with what were chimerical only, did we fail to regard space as simply condition to the elements of sense, which elements shall constitute the stuff and material of external experience. Said pure synthetic judgments, consequently, do, though only mediately, refer to possible experience, or rather to just this possibility of it, and on it alone they ground the objective truth of their synthesis.

Experience, as empirical synthesis, is thus, in its possibility, that single knowledge which extends realization to all other syntheses; and this latter, again, as a cognition *a priori*, gets truth (agreement with an object), only by this, that it has no interest but what is necessary for the synthetic unity of experience as such.

The ultimate principle of all synthetic judgments, therefore, is: Every object stands under the necessary conditions of the synthetic unity of the complex of perception in a possible experience.

Synthetic judgments are *a priori* possible, then, if, to the formal conditions of *a priori* perception, the synthesis of imagination, and the necessary unity of it in a transcendental apperception—if to this transcendental machinery we give the general direction towards a possible empirical cognition, and say: The conditions of *the possibility of experience in general* are conditions as well of *the possibility of the objects of experience*, and possess thereby objective reality in a necessary synthetic judgment.

Section 3. Systematic Idea of all Synthetic Ground-Propositions of the Understanding.

That there are such propositions at all, is to be solely ascribed to pure understanding. And pure understanding is not only the faculty of the rules that bear on the connexions of experience, but is source as well of those propositions through which it is that whatever is only capable of becoming an object for us stands necessarily under rules; for without such rules there could never accrue to the sense-impressions cognition of an object corresponding to them. Even the laws of nature, considered as principles of the empirical use of understanding, bring with them an expression of necessity, and, consequently, at least the presumption of being determined by grounds which must be valid *a priori* and before all experience. But all laws of nature, without exception, stand under higher principles of the understanding, inasmuch as they only apply these to special cases of experience. These principles alone, therefore, furnish the notion, which constitutes the condition and, as it were, the exponent towards production of a rule; while experience, for its part, again, supplies the case which is to come under the rule.

There is little danger that empirical principles should be mistaken for those of pure understanding, or *vice versa;* for the necessity on notions in the one case, and in the other the want of it (so easily seen, however generally the proposition may hold), readily preclude confusion. There are, however, certain pure *a priori* propositions which I should not attribute to pure understanding. These, namely, are not derived from pure notions, but from pure *perceptions*

(though through understanding), and it is of *notions* that understanding is the faculty. Such propositions are found in mathematics. As said, they are perceptive in their nature, but, nevertheless, the *deduction* of them—what concerns their authority in experience, their objective truth, nay, the possibility of the *a priori* synthetic cognition they involve—depends still on pure understanding.

Under my own principles, then, if I exclude from them the *propositions* of mathematics, I shall certainly include those on which these rest for their very possibility and *a priori* objective truth. Of said propositions these, therefore, shall constitute the principles proper—not originating from perception for notions, but from notions for perception.

In the application of the categories, again, to possible experience, these, in exercising their synthesis, will, as formerly classed, be either mathematical or dynamical. The former, that is, will address their synthesis to the *perception* (the very being), the latter to the *relative existence* (the simple connexions), of objects of sense.[1] The *a priori* conditions of perception are, in regard of a possible experience, out and out necessary; while those, again, of the relative existence of the objects of a possible empirical perception are in themselves only contingent. Hence the propositions that arise in the mathematical application will be unconditionally

[1] I have translated above the single word "Daseyn" by the two words "relative existence;" and that is exactly what Kant means by it. He has not a thought of *bringing* into existence in his mind: he only thinks of objects relatively the one to the other in regard of connexion, once their existence has been provided for from elsewhere. It is of their *seyn* as relatively *da* he thinks, and not at all of their existence as such. *Erscheinung* I sometimes translate simply object of sense, when legitimate occasion offers.

necessary, that is, apodictic; while those that are of dynamical name will bring with them the character, indeed, of an *a priori* necessity, but only under the condition of the *empirical* thinking that shall be found in an experience. These latter, then, will exhibit this character only mediately and indirectly: and, consequently (without prejudice to the universal certainty introduced by them into experience), they will not possess the same immediate evidence which is proper and peculiar to the others. But this will be better seen in the sequel.

The table of the categories guides us quite naturally to that of the ground-propositions: these, namely, are nothing but rules of the objective application of those. Accordingly all the ground-propositions of pure understanding are—

1. Axioms of Pure Perception.
2. Anticipations of Sense-Perception.
3. Analogies of Experience.
4. Postulates of Empirical Thinking in General.

I have chosen these designations purposely, in order that the differences of evidence and use on the part of those propositions should not pass unobserved. It will be directly perceived, however, that, as regards as well the evidence as the *a priori* action on objects which is connected with the categories of quantity and quality (in respect of this latter *form* alone being considered), the relative propositions are, in both references, conspicuously different from the other two: the force or import on both sides being equally that of complete certainty, it is only discursive in the latter, while it is intuitive in the former. These, therefore, I shall call the *mathematical*, and those the *dynamical*, ground-propositions.[1] It is to

[1] All *conjunction* is either *composition* or *connexion*. The former is a

be borne in mind, however, that I have in my eye here just as little the propositions of mathematics in the one case, as those of (physical) dynamics in the other, but only those of pure understanding when it is related to inner, *a priori* sense (without reference, that is, to the elements themselves afterwards given by special sense). Nevertheless, it is on these last propositions that the former (the mathematical, etc.) are dependent for their very possibility. The designations I give said ground-propositions, therefore, are due to considerations rather of their application than of their own contents. But I proceed now to the discussion of them, and in the order in which they appear in the table.

1. Axioms of Pure Perception.

The principle of these is: All perceptions are extensive magnitudes.

Proof.

All objects involve in form a perception in space and time; and this influence of space and time is

synthesis of elements, *not* necessarily belonging the one to the other. For instance, the two triangles into which the diagonal divides a square do *not*, taken as individuals, necessarily belong the one to the other. Of this nature, now, is the *homogeneous* synthesis in whatever can be *mathematically* looked at; and it is capable of being distinguished either into that of *aggregation*, in *extensive*, or into that of *coalition*, in *intensive*, magnitudes. The latter *conjunction* (that of *connexion*, namely) is a synthesis of elements that *do* necessarily belong the one to the other. Substance and accident, cause and effect, for example, are regarded as constituting *a priori* (necessary) connexions. The connected elements at the same time are *heterogeneous*. As of elements *relatively existent* the one to the other, I call this synthesis *dynamical;* which on its side, again, is capable of distinction as *physical* (of objects mutually) or *metaphysical* (of objects considered on the question of their evidence to the mind).—K. The last "können" here were better *kann?*

presupposed as *a priori* universal condition that precedes and underlies all objects. These, therefore, cannot be otherwise apprehended (taken up, that is, into empirical consciousness) than through synthesis of the complex of constitutive units, by which synthesis there are brought about perceptions of a determinate space or a determinate time. This synthesis, then, is a putting together of homogeneous elements, and results in a consciousness of the synthetic unity of just such complex. Now consciousness of any homogeneous complex in perception, so far as it is conceived necessary for rendering possible the idea of an object, is the notion of magnitude (*quantum*). Consequently even the perception of an object, as phenomenon in our sense, is only possible through the same synthetic unity of the given sensuously perceptive complex, by means of which the unity of homogeneous synthesis is, in the notion of quantity, *thought*. That is, the phenomena of our sense are all quantities—all *extensive magnitudes*, indeed—because, as perceptions in space and time, they must come before us in or through precisely the same synthesis as is determinative of space and time themselves.

I call that magnitude an extensive magnitude, where the cognition of the parts renders possible the cognition of the whole (and, consequently, necessarily precedes it). I cannot picture to myself a line, how small soever, without in thought *drawing* it; and to draw a line is, from a certain point, to generate all the parts of it, one after the other, and so mark out the object itself. And this is equally the case with all the parts, however infinitesimal, of time. I figure to myself in it only the successive progression from moment to moment, and in such manner that at last, through all these parts of time and the synthesis of

them, there is generated a certain definite and determinate time-magnitude. But the element of perception pure and proper in all objects of our sense, being either space or time, every such object must, as *perception*, be an extensive magnitude: it can be recognised in apprehension, namely, only through successive synthesis (of part to part). All objects of sense, therefore, are perceived as *aggregates* (collections of parts previously given); and this, be it observed, is not the case in regard of every kind of magnitude, but only of that kind where the magnitudes are apprehended and cognised as, strictly and properly, extensive.

It is on this successive synthesis of productive imagination in the generation of figures that the mathematic of extension (geometry) founds. Its axioms express the *a priori* conditions of sense-perception; and under these conditions only is a schema possible of any pure notion of external perception: as, for example, between any two points only one straight line is possible, two straight lines cannot include a space, etc. These are axioms which apply properly to magnitudes (*quanta*) as such.

But as regards quantity (*quantitas*), that is, the answer to the question, how much or great something is, there are in that respect not any axioms; at the same time that in the general reference there are various synthetic and immediately certain propositions (*indemonstrabilia*). For that, if equals be added to equals, the wholes are equal, or if equals be taken from equals, the remainders are equal—these are analytic propositions, seeing that I am directly conscious of the identity of the one amount with the other, whereas axioms are synthetic *a priori* propositions. And, again, the evident propositions in the

relations of numbers, though synthetic certainly, are not universal like those of geometry, and consequently not axioms. They may be named numerical formulæ. The proposition $7 + 5 = 12$ is not analytic. For neither in the 7, nor the 5, nor the conjunction of both, do I think the number 12 (that I do think it in the *addition* of the two, that is not the question here; for, in an analytic proposition, the question only is, whether I actually think the predicate *in* the notion of the subject). But though synthetic, it is only a particular proposition. So far as the synthesis of the units simply is considered here, that synthesis can be accomplished only in one certain particular way, at the same time, certainly, that the application of these numbers is afterwards universal. When I say, it is possible to construct a triangle by means of three lines, of which any two are together greater than the third, I am present to the mere function of productive imagination which draws the lines smaller or greater, and allows them to meet in all manner of angles at will. Whereas the number 7 is only possible in one single way, as is the case also with the 12 which results from the synthesis of the former with 5. Such propositions, therefore, we may call numerical formulæ, but not axioms. We should otherwise have quite an infinitude of the latter.

This transcendental ground-proposition of the mathematics of sense greatly enlarges our *a priori* knowledge. For it, and it alone, renders pure mathematic applicable in its complete precision to objects of experience. And this latter fact without it, indeed, is so far from being of itself evident, that it has given rise to much controversy. Perceptions of sense are not things in themselves. Empirical perception is only possible through pure (space and time). What geometry

says of the latter, therefore, is necessarily true of the former; and such allegations in resistance as that objects of sense need not be submitted to the laws of construction in space (the infinite divisibility of lines and angles, for example), must sink of themselves.[1] For objective truth were thereby denied to space, and along with it to all mathematics, so that it would be impossible for us any longer to know why and how far the latter were to be held applicable of the objects of sense. The synthesis of spaces and times it is, that, as synthesis of the essential form of all perception, is what renders possible at the same time empirical apprehension, and consequently all external experience and all perception of any of its objects; and what holds of mathematics in application to the former synthesis is necessarily true also of this latter. All objections to this are mere chicanes of an ill-advised reasoning, which would erroneously free the objects of sense from the formal conditions of our sensibility, and represent them as objects in themselves and addressed so to the understanding—the truth being that they are mere affections of, or appearances to, our senses. In fact, were they such objects and so given to the understanding, then truly there could be synthetically known nothing whatever *a priori* of them, and consequently nothing whatever also of space through pure notions; nay, the very science which is determinative of space (geometry), would itself be impossible.

[1] The "dürfe" and "muss" here ought surely to be *dürfen* and *müssen*.

2. Anticipations of Sense.

The principle of these is, In all perceptions of sense, the *reale* that is matter of sensation has intensive magnitude—that is, degree.

Proof.

Sense-perception is empirical consciousness, or such that it has at the same time sensation in it. Sense-affections, as objects of sense-perception, are not pure (merely formal) perceptions, like space and time (which, for their parts, can, in themselves, not be perceived of sense). They contain, therefore, over and above the element of pure perception, the *material* elements towards an object (that element or those elements whereby *something* is cognised as existent *in* space or time). These material elements are constituted by the *reale* of sensation, as mere subjective feeling of which there can only be the consciousness that the subject is so affected, and which is then referred to some object. Now, from empirical to pure consciousness there is a gradual transition possible, in the course of which the *reale* that is present in it at first may, in the end, completely disappear, and there will remain at last a merely formal consciousness (now *a priori*) of the complex proper to space and time alone. Contrariwise, consequently, there is the possibility of a *synthesis* in the amount of a sensation, up from its beginning, as nothing in pure perception, until it reaches any conceivable magnitude of feeling in consciousness. Sensation, now, being in itself not an objective consciousness, and involving, as such, neither the perception of space nor of time, is incapable of constituting an extensive magnitude. Still it is a magnitude, and a magnitude

such that, in the apprehension of it, empirical consciousness increases, from the nothing of it in a certain time, up to the given actual amount. This, then, is intensive magnitude; and such magnitude, degree, that is, of influence on sense, must be correspondingly attributed to all perceptive objects so far as they involve sensation.

Whatever cognition enables us to know and determine *a priori*, or beforehand, some actual ingredient of empirical perception, that cognition we may name an anticipation; and beyond a doubt that is the sense in which Epicurus used his term προλήψις. Inasmuch, however, as there is something in the perceptions of sense which can never be known *a priori*, and which, therefore, constitutes the element specially distinctive of empirical cognition as compared with cognition *a priori*, sensation, namely (as the *matter* of the perception of sense), it follows that it is precisely and specially that which cannot possibly be anticipated. On the other hand, we may very well name any pure determinations in space and time, whether of shape or size, anticipations of the objects of sense, because they *a priori* present to us a constant constituent of whatever may be actually *a posteriori* given to us. Suppose, however, that, in mere sensation as sensation, sensation as such (not referring to any particular given sensation), it were possible *a priori* to know something, such something would, certainly, very specially deserve to be named an anticipation. For it could not but prove surprising to forestall experience even in what was peculiar to it—its matter, namely, which as matter it is to be supposed we could only procure *from* experience. Now, such is the actual state of the case in point of fact before us.

The apprehension of mere sensation occupies only

a moment (of course not referring to succession of different sensations). So far, as there is in apprehension no successive synthesis (of part after part into a whole), there is no question here of an extensive magnitude: the ceasing of sensation in the moment it occupies would exhibit this moment as void, consequently = 0. What in the empirical perception, now, corresponds to the mere sensation is reality (*realitas phænomenon*); as what answers to the want of it is negation, which is = 0. But, again, every sensation is capable of a diminution, in such manner that it may gradually grow faint and disappear. There is between reality and negation in the sense-consciousness, then, a continued series of many possible intervening sensations, differing the one from the other always by a less difference than that between the full given amount and the zero or complete negation. That is, the *reale* in the sense-presentation has always a magnitude, but a magnitude that does not appear in apprehension as a magnitude, seeing that said apprehension takes place in a moment through the mere sensation, and not through a successive synthesis of several sensations—not, therefore, of part after part into a whole. This *reale* of any sense-presentation, consequently, has a magnitude, but not of the kind that is named extensive.

A magnitude, now, which is apprehended only as a one, a unit, and in which a *many* (plurality) is only conceivable as that of an approach to negation = 0 —this I call an *intensive magnitude*. The reality of any object possesses, then, intensive magnitude, or degree. Were this reality looked at in the point of view of a cause (of the sensation, or of any other element in some cognition, say of a change, for example), then the degree in it were to be named *moment* (*e.g.*,

moment of gravity), and for the reason that degree betokens a magnitude, the apprehension of which is not successive, but instantaneous. I remark this, however, only in passing; for with causality I have nothing as yet to do.

Every sensation, and consequently every reality in the object or perception of sense, let each be as small as it may, have, according to this, a degree—an intensive magnitude, which, as such, is always capable of becoming less and less, and so that, between reality and negation in it, there is an unbroken continuity of possible smaller realities, and possible smaller perceptions. A colour, a red, for example, has a degree which, let it be ever so small, is never the smallest; and it is situated precisely in the same way with heat, gravity, etc.

That property of magnitudes, whereby no one part in them is the smallest possible (no part is simple), we name the *continuity* of these. Space and time are *quanta continua:* no part can be taken in them without including it between limits (points and moments); only in such manner, consequently, that the part itself is again a space or a time. Space, therefore, consists only of spaces, time of times. Points and moments (instants) are only limits, that is, mere *loci* of limitation in them. *Loci* of limitation always presuppose, however, the objects which they are to limit or determine; and out of such mere *loci* as constituents which shall be capable of being given before space or time themselves, neither the one nor the other can be made up. Magnitudes of this kind may be termed *fluent*, seeing that the synthesis (of productive imagination) in their genesis is a progression in time, the continuity of which we usually characterize by the expression *flux* or *flowing*.

All objects of sense, accordingly, are continuous magnitudes; as well in perception proper, where they are extensive, as in sensation proper, where they are intensive, magnitudes. If the synthesis of the sense-complex be interrupted, then we have an aggregate of several sense-units, and not properly a single sense-cognition as *a* quantum; for a quantum is generated, not by the mere progression of a productive synthesis of some kind, but by the repetition of a synthesis that is as well perpetually ceasing. If I call 13 dollars a money-quantum, I am right so far as I understand by the expression the amount of a mark in fine silver; such mark being undoubtedly a continuous magnitude in which no one part is the smallest possible, but each part is capable of constituting a bit of coin, with the possibility in it of supplying matter for still smaller bits, and so on. If, however, I understand by the expression 13 round dollars, just so many coins (their actual silver amount being what it may), then I name it improperly quantum; rather, as a number of separate silver pieces, I must call it an aggregate. Still, number, nevertheless, always implying the principle of unity, the conjoint cognition is as unity a quantum, and as a quantum always also a continuum.

All objects, now, whether as extensive or intensive, being continuous magnitudes, the proposition that all mutation also (transition of something from one state into another) is continuous, might be very easily proved here, and with mathematical evidence, did not the causality of a mutation at all lie quite without the bounds of a transcendental philosophy, and presuppose empirical principles. For that there is such a thing as a cause possible—something, that is, capable of changing the condition of things, or even determin-

ing in them the contrary of some given state—of that there is not a hint given us in understanding *a priori*. And this, not only because there is no possible understanding of such a thing (for we are similarly situated with other *a priori* cognitions), but because mutability concerns certain determinations of objects which we can only learn from experience; not but that what is called cause in a mutation must be sought in principles which are beyond mutation. Here, however, we have nothing available before us but the pure primitive notions of all possible experience, which must be free from everything empirical; and it is impossible for us, therefore, prematurely to approach the subject of a *physica pura*, built, as it is, on certain fundamental facts of experience itself, without injury to the unity of the system.

We do not suffer under any scarcity of proofs, however, of the great influence which our principle here possesses in anticipation of perceptions, and even in supplement so far of any want of them, that it shuts the door in the face of all erroneous inferences that might be drawn thence.

For if all reality of perception has a degree, between which and negation there is the possibility of an infinite series of ever-lessening degrees, and if, moreover, each sense must possess only a certain degree in its receptivity of sensation, it is evident that no perception or experience can possibly prove, mediately or immediately, or by whatever expedient we may conceive, an entire want of reality before sense. There can be drawn from experience, that is, never any proof of either a void space or a void time. For the total want of reality in the perception of sense can itself, firstly, not be perceived; and, secondly, from no single cognition of sense and the difference in the

degree of its reality, is it possible for it to be inferred, or ought it even for explanation of it (the reality) to be at any time assumed. For, though the entire perception of a certain definite space or time be out and out real (no part of it, that is, void), still, because every reality has its degree, which, independently of any change in the extensive magnitude of the relative object, may decrease infinitely even to nothing (the void), there must be infinitely different degrees in the filling of space or time; so that in different objects the intensive magnitudes may be greater or less, at the same time that their extensive magnitudes are equal.

We shall exemplify this. Almost all teachers of natural philosophy, inasmuch as they observe, on the part of different kinds of matter, great differences of quantity under equal bulk (partly through the moment of gravity or weight, partly through that of resistance to other bodies in motion), unanimously infer from this that volume (bulk, extensive magnitude) must, in all bodies, be more or less empty. But who would ever suppose it possible of these mostly mathematical and mechanical inquirers that they rested this their inference solely on — what they pretended so carefully to avoid — a metaphysical presupposition? A presupposition of this kind they make plainly here, however, in that they assume the *reale* in space (not to call it here impenetrability or weight, which are empirical ideas) to be *everywhere alike*, and to differ only in extensive magnitude or quantitative amount. To this presupposition, for which they could have no grounds in experience, I oppose a transcendental rationale. I do not pretend to explain thereby differences in the filling of space, but only to negate said presupposition in the necessity it assumes that

such differences can be explained not otherwise than by the hypothesis of empty spaces (pores). This rationale will have at least the merit to set understanding free to think differently for itself the difference in question, if an hypothesis at all is to be held necessary here for the explanation of the natural fact. We see from what has been said, namely, that, though two equal spaces may be completely filled with different matter, and even in such a manner that in neither of them a point can be found in which matter is not present, still every *reale* has, with the same quality, its own degree (of resistance or weight) which, without diminution of its extensive magnitude, may become infinitely less and less, before actually passing over into vacancy and disappearing. Thus, an expansible element which occupies a certain space, say heat, and in like manner every other reality (to sense), may, without in the least leaving any smallest part of the space void, infinitely diminish in its degrees, and nevertheless quite as well fill the space with these smaller degrees, as some other object with greater ones. I do not at all mean to maintain here that, with the diversity of matters, and in the ratio of their specific weights, this is actually the case, but only to demonstrate, from a proposition of pure understanding, that the nature of our sense-perceptions makes such a mode of explanation possible. But, that being so, it must be erroneously assumed and, through an alleged *a priori* principle of the understanding, erroneously maintained, that the *reale* of objects is always equal in degree, and only different in aggregation and extensive magnitude.

Nevertheless this anticipation of perception has for an inquirer who is transcendentally trained, and accustomed, therefore, to be on his guard, always some-

thing that surprises and arrests attention. It excites doubt and reflection that the understanding should be capable of anticipating a synthetic proposition such as that about the degree of all reality in objects, and about the possibility, consequently, of an inner difference in the sensation itself, abstracting, that is, from the empirical quality (as so and so) of the objects themselves. It is a question, therefore, well worth answering, How it is that the understanding is able synthetically to pronounce *a priori* upon objects, and even to anticipate these in what is properly and purely empirical—what, namely, concerns sensation.

The *quality* of the sensation—colour, savour, etc.—is always merely empirical, and cannot be *a priori* realized. But the *reale* that corresponds to the sensations taken quite generally, and as in contrast to the negation = 0, represents only something, the notion of which implies being, and means the synthesis in empirical consciousness generally. In inner sense, namely, the empirical consciousness may be raised from 0 up to any possible greater degree; and thus the very same extensive magnitude (an illuminated surface, say) may excite quite as much sensation as an aggregate of several (less illuminated) others at once. The extensive magnitude of the object, then, may be completely abstracted from; and yet we may perfectly well conceive, in a single moment of mere sensation, a synthesis of uniform successive rise from 0 up to the given empirical consciousness. All sensations, therefore, are, as such, only *a posteriori* given, but the property in them, that they possess degree, may be recognised *a priori*. It is remarkable that, of quantity generally, we can *a priori* know only a single *quality* (continuity), and of quality generally only a

single *quantity* (intension, degree): anything further is left for experience.

3. Analogies of Experience.

The principle of these is, That experience is only possible through consciousness of a necessary connexion in the perceptions (objects) of sense.

Proof.

Experience is empirical cognition, *i.e.*, cognition that, through perceptions of sense, determines an object. Experience, therefore, is *synthesis* of said perceptions, a synthesis that is not given *by* perception, but that rather gives *to* its implied sense-complex, the synthetic unity of a certain single act of consciousness. This synthetic unity constitutes what is essential to a perceptive recognition of objects, *i.e.*, to *experience* (not, that is, to mere subjective sensation or perception). Perceptions, now, at first hand, come together only contingently;[1] there neither appears, nor can appear, any necessity of connexion in them so far, any necessity brought by themselves. Apprehension, as yet, is only a taking up, one with the other, of the units of the perception. In these units, so far, consequently, there is not to be found any hint of the necessity which shall effect for them connexion of existence as objects in space and time.

[1] Kant adds here "in experience;" and he means by the latter word, not the completed process of experience when raised into objectivity and necessity by categories, but only its first stage of subjective affection, the empirical apprehension of mere units of sensation. As, however, the word immediately both precedes and follows in its other and full sense, I omit it here where it is not necessary. Kant using it, almost at the same moment, in this double way, excellently illustrates for us his habitual manner of writing. Perhaps it was "apprehension" he had in mind.

Experience, now, is a completed cognition and recognition of objects through perceptions of sense. It is on sense-perception becoming experience, therefore, that there is effected a relation of the units of the complex in regard of their existence mutually. The complex is regarded now, that is, not as it merely presents itself at first hand in time, but as at last it is experienced *objectively* in time. But time, again, is not itself perceived; the ultimate determination of existential objects in time, then, is no product of time itself, but must result from the *synthesis* in time. But such synthesis, so placed, can only take place through *a priori notions* of connexion. These notions, now, for their part, lastly, must, as such, or being *a priori*, bring always *necessity* along with them. *Experience*, then, can only possibly result from a recognition of necessary connexion in our various perceptions.[1]

The three *modi* of time are *persistence*, *sequence* or *succession*, and *simultaneity*. Hence three laws of all relations of objects in time will precede experience, and as conditions, indeed, of its very possibility. These laws will determine for every object its relative existential place in regard of unity (connexion) always or at any time (A being, B will be, etc.)

The general principle of all three analogies depends on the necessary *unity* of apperception as regards every possible empirical consciousness (perception) *at any and every time*, and, consequently, said unity

[1] Apprehension, already possessed of the *a priori spectra* space and time, receives into these the units of sensation special, but as yet only confusedly and fortuitously together. Experience does more: it *binds*, and into a context of objects in space and time. This *binding* is, evidently, not possibly due either to unperceivable time or the sensations themselves as such. It can only result from the categories, as *a priori* functions of synthesis into the unity of self-consciousness. Then imagination is the one common faculty of apprehension that actuates all.

being *a priori* implied, on the synthetic unity (connexion) of all objects in respect of their relation in time. For original apperception refers itself to inner sense (the recipient of all cognitions)—refers itself *a priori* to the form of inner sense, *i.e.*, to the relation of the units of the complex empirical consciousness, the one to the other, as in the form of time. Said complex, again, is, as a whole, to be united, but in accordance with its time-relations, into original apperception; for that is just what the transcendental unity of apperception *a priori* prescribes, inasmuch as under this unity there must stand everything that is to be a cognition of mine, specially *mine*—everything, consequently, that can be for *me* an object. This synthetic unity in the time-relation of the perceptions, *a priori* determined, is therefore the law, That every empirical determination in time must stand under rules of general time-determination, and the analogies of experience (which we proceed to treat) must constitute these rules.

These analogies have this peculiarity, that they do not have in regard the objects or the synthesis of their empirical perception as it is in space, but merely their existence, or rather their relation mutually in regard of their existence. Now how something comes to be apprehended as perception (as construction in space) can be *a priori* determined in this way, that the rule of its synthesis can at the same time, so far, *a priori* give the perception (general form of the construction in space), as will be necessarily exemplified in every occurrent empirical case—that, in fact, said rule of synthesis can realize said perception (*perception* being quite generally understood as construction in space).[1]

[1] In the above sentence "Erscheinung" means only, and probably should be, *Anschauung*.

But the existence of objects (not their mere perceptive form as due *a priori* to that of space) cannot be determined or cannot come to be known *a priori;* and, though we might in this way (*a priori*) be able to reason or infer in regard to some certain existence, we should be quite unable, nevertheless, literally to cognise or perceive that existence. We should be quite unable, that is, to anticipate that whereby, as an actual empirical object, said existence were distinguishable from others.

The two previous ground-propositions, which I called the mathematical ones (as, in effect, it is they entitle mathematics to be empirically applied), related to objects in their mere possibility as objects (individually), and instructed us how these objects, as well in their perceptive form (extension) as in the *reale* of their sense-matter (intension, degree), might, according to rules of a mathematical synthesis, come to be constructed. Hence, in regard of both of them, numbers may be used, and with these an object as a magnitude determined. Thus, for example, I might make up the degree of the sensations of sunlight by means, say, of 200,000 illuminations of the moon—I might, in this way, *a priori*, determinately give it, that is, construct it. Hence we may name these two (previous) ground-propositions *constitutive.*

But it must be quite differently situated with those which have to bring under *a priori* rules the *existence* of objects. For, that (existence) being incapable of *a priori* construction, the propositions concerned will only refer to *relation of existence*, and avail to contribute, consequently, only *regulative* principles. In their case, therefore, there will be no question of either *axioms* or *anticipations.* But, *one* perception of sense, in a certain relation of time to an *other* (for its part, not

necessarily determined), being given us, they (these propositions) will authorize us *a priori* to say *how*, in said *modus* of time, the latter object or perception is necessarily connected with the former object or perception from the point of view of their existence mutually, but not *what*, from the point of view of extension or intension (quantity and quality) said latter perception actually is. Analogies in philosophy have not the same meaning as in mathematical usage. In the latter reference they are formulæ which pronounce the equality of two ratios, always *constitutively*, and so that three terms being given, the fourth is thereby also given, or can be constructed. An analogy in philosophy, on the other hand, is not the equality of two quantitative, but of two qualitative relations, where, from three given terms, I can *a priori* discover and assign, not the fourth term itself, but only a certain relation to this fourth term. Nevertheless, I have certainly in this way a rule whereby to look for it in experience, and a mark whereby to recognise it there when found. An analogy of experience, therefore, will be no more than a rule or law, by virtue of which the perceptions of sense shall be raised into the unity of experience. But in the production of these perceptions as empirical perceptions it has no power or part whatever: it is a primary proposition or principle that holds of objects (as mere phenomena of sense) not *constitutively*, but only *regulatively*. Nor shall we be able to say more than this for the postulates of empirical reflection. These postulates consider only the synthesis of *pure* perception (the *form* of a presentation to sense); the synthesis of *sense*-perception (the *matter* in the presentation to sense); and, lastly, the synthesis of *experience* (the *relation* or *connexion* in the presentations to sense).

They are only regulative principles, then, and to be distinguished from the mathematical ones (which are constitutive), not in the certainty—a quality that stands fast *a priori* in both—but still in the kind of their evidence. That is, their evidence is not intuitive (and, consequently, not demonstrative), like that of the mathematical primary propositions.

What we remarked, however, in regard to all the synthetic primary principles, and have specially to accentuate here, is this, that, not as principles of the transcendental, but only of the empirical exercise of understanding, is it, that these analogies possess, and can be proved to possess, their entire significance and validity in use; and that objects, consequently (regarded always as mere phenomena of sense), must not be subsumed directly under the categories, but only under the schemata. For, were the objects, to which these principles are to be applied, things in themselves, it were simply impossible, *a priori* and synthetically, to make anything out in their regard. On the contrary, however, these objects are only phenomena of sense, presentations to sense, appearances in sense, and a complete knowledge of them can only come from possible experience. All *a priori* principles must at last, therefore, refer to that knowledge. They can have in view, consequently, only the conditions of the unity of empirical cognition in the synthesis of the objects. This synthesis (so conditioned) is only thought in the schema of the category. The category, indeed, is what functions unity to this synthesis as a synthesis, and that without restriction of any condition of sense. We shall be authorized, therefore, by these ground-propositions, to put objects together only as in analogy with the logical and universal unity of the notions (categories);

and, in the primary proposition itself, we shall avail ourselves, consequently, of the category, but, in the execution (the application to objects), set, in place of the primary proposition, the schema of the category as the key to its (the category's) use, or rather place the schema beside the category, as restricting condition under the name of a formula of the primary proposition.

A. First Analogy.

Primary Proposition of the Permanence of Substance.

In all mutation of the objects of sense, substance remains (is permanent), and the quantum of these objects is, in nature, neither increased nor lessened.

Proof.

All objects of sense are in time, in which, as substrate (permanent form of inner sense), *simultaneity* as well as *sequence* can alone be conceived or represented. Time, therefore, in which all vicissitude of objects is to be thought, remains and does not itself alter, because it is that in which succession or simultaneity can be conceived or represented only as determinations of itself. Time, now, can, *per se*, not be perceived—strictly and properly *perceived* as though it were an object *per se*. Consequently, in the elements of sense must lie that substrate which is to relieve (exhibit) time, and by reference to which, through the relation of objects to it, all alternation or all simultaneity can be recognised. But *substance*, now, is the substrate of all that, as real, constitutes the existence of things, and in such manner that whatever takes place in existence, or comes to exist, can only be thought as a determination of it. That permanent

element, consequently, in relation to which all time-relations of objects can alone be determined, is the substance in all the shows of sense; it is that *reale* of these which, as substrate of all alteration, ever remains the same. Inasmuch, therefore, as substance enters not into the alteration of existence, neither can the quantum of it in nature be either lessened or increased.

Our *apprehension* of any sensible complex is always successive, and, consequently, always in alteration. We can never determine in this way alone, then, whether this complex (that is, the units in it), *as object of experience*, exhibits a case of co-existence or of sequence. For that there must be presupposed to lie under the all of things, something that always is, something permanent and persistent, in regard of which all alteration and all simultaneity are but so many modes (time-modes) in which it itself—this that is always permanent and persistent—exists. Only in this permanent element, therefore, are time-relations possible (for simultaneity and succession constitute all the relations in time); *i.e.*, this permanent element is the substratum of the empirical perception of time itself, and only by reference to it is any determination as in time at all possible. As the constant correlate of all states of objects, whether those of alteration or of co-existence, time itself expresses permanence. For alteration does not affect time itself, but only the things in time (and similarly, in effect, co-existence is not a *modus* of time itself, not any one part of which is at once with another, but each is after the other). Did we wish to conceive time itself as an object such that all its parts were sequent the one to the other, we should, for the realization of this, require to call in another time, in which the

sequence were possible. By reason of a permanent element alone does existence, necessarily in different and only successive parts of time, acquire, nevertheless, a *magnitude*, which we name *duration*. For in the mere succession existence is always only going and coming, and cannot be said to possess even the smallest magnitude. Without this permanent element, therefore, there is not any relation of time. Now time cannot in itself be perceived. This permanent element, consequently, is, for the objects of sense, the substrate of all their determinations in time. This substrate, further, therefore, is the condition of the possibility of all synthetic unity in our perceptions, *i.e.*, in experience; and, by reference to this permanent element, all co-existence or alteration in time can be regarded as mere *modus* of the existence of that which remains and persists. The permanent element in all intimations to sense is thus the object itself, *i.e.*, substance (phænomenon); while all that alters or can alter holds only of the mode in which this substance or these substances exist, only, consequently, of their mere determinations.

I find that, in every age, not only the philosopher, but even men of ordinary understanding, have assumed this permanence as substrate of all the changes of things. I presume also that this will be always so; only, the philosopher will continue to express himself more exactly thus: In all alterations in the world, substance persists, and only the accidents change. I find nowhere, however, even any attempt to prove this synthetic proposition. Nay, it only rarely gets the place that belongs to it, at the head of the pure and completely *a priori* valid laws of nature. The proposition that substance is permanent is in effect tautological. For it is just because of this per-

manence that we apply the category of substance to objects, and it ought to have been proved that there is something permanent in objects, in reference to which what changes is but determination of its existence. Being synthetic and *a priori*, there can be no proof of this proposition dogmatically, or from notions. Neither has it been consequently thought that such propositions are only valid for possible experience, and can be proved, therefore, only by a deduction of such possibility. It is no wonder, then, that, though assumed for all experience (because its necessity for empirical cognition was felt), it has never been proved.

A philosopher was asked, How much does smoke weigh? He answered: Deduct from the weight of the wood that was burned, the weight of the ash that is left, and you have the weight of the smoke. He assumed as undeniable, therefore, that matter (substance) does not perish even in fire, but only undergoes an alteration in form. Just in the same way the proposition, From nothing comes nothing, was another inference from the principle of permanence, or rather of the constant existence of the subject proper in objects. For what we call substance being that in nature that is to be the special subject of all determinations in time, all existence, as well past as future, must be determined wholly and solely in reference to *it*. Hence we can give an object the name of substance only because we presuppose its existence for all time; and the word durableness does not well express this, the reference it implies looking rather to the future. Nevertheless the inner necessity to endure (continue permanent, persist) is inseparably connected with the necessity to have always been, and our expressions may stand. *Gigni*

de nihilo nihil, in nihilum nil posse reverti, were two propositions which the ancients invariably conjoined, and which we now sometimes mistakenly disjoin, because we suppose that they concern things in themselves, and the former might seem to controvert the dependence of the world (even in its substance) on a First Cause. The fear is unnecessary, however; for what is spoken of are only objects of sense in the field of experience, and their unity would be impossible if (in substance) we assumed the origination of new things. Then, namely, that would fail which can alone represent the unity of time—the identity of the substrate, which alone guarantees abiding unity throughout all change. This permanency is, at the same time, nothing but the mode in which (though knowing only affection) we represent to ourselves things.

The determinations of a substance which are nothing else than its particular modes to exist, are called *accidents*. They are in every case real, for they concern the existence of the substance (negations are only determinations expressive of the non-being of something in the substance). If we attribute to this *reale* in respect of substance a particular kind of existence (*e.g.*, motion as an accident of matter), we call it *inherence*, in contradistinction to *subsistence* in the case of substance. But this leads to many mistakes, and our expression will be more correct and exact if we describe the accident only as the mode in which the existence of a substance is positively determined. At the same time, however, it is unavoidable because of the conditions of the logical exercise of understanding, as it were, to separate what is susceptible of mutation in the existence of a substance (the substance itself enduring), and to consider it in rela-

tion to what is specially permanent and radical. Hence this category, then, will come under the head of relations, rather as condition of these, than as itself containing a relation.

On this permanency depends now the legitimation of the notion of change. Origin and decease are not changes of what originates or deceases. Change is a mode in which to exist, which mode ensues on another mode to exist on the part of the same object. All that changes, therefore, persists, and only its *state* alters. Change, then, only concerning such determinations as may cease or begin, it is possible for us to use an apparently paradox expression, and say, Only what is permanent (substance) alters; what is changeable suffers no change, but only an *exchange*, certain determinations ceasing and others beginning.[1]

Change is capable of being observed, then, only in regard of substances. Origin or decease absolutely, that is, not being mere determination of something permanent, cannot possibly be witnessed. It is precisely this element of permanency, namely, which makes it possible for us to perceive or conceive transition from one state to another, and from non-being to being. These states, therefore, are only to be empirically recognised as alternating determinations of what is permanent. Assume something absolutely to begin to be; you necessarily assume also a point of time in which it was not. To what, now, would you attach this point, if not to what already is? For an empty time which might precede, is no object of perception. But, were the thing assumed to begin joined on to things which previously were and have

[1] It misleads to take Kant's use of "Wechsel" here as of universal or exclusive application. On the contrary, as we have seen a score of times already, Kant usually means by the word only change as such.

continued till this, then what begins is only a determination of what has continued. And it is not otherwise with decease; for it necessitates assumption of the empirical perception of a time no longer containing anything.

Substances (in nature as show of sense) are the substrates of all determinations in time. The origin of some of them, and the decease of others, would even destroy the single indispensable condition of the empirical unity of time, and objects then might be in two sorts of time at once, and in these, two existences would necessarily flow side by side, which is absurd. For there is only a *one* time, in which the different times are, of necessity, not simultaneous but sequent.

Permanency, then, is a necessary condition under which alone affections of sense are determinable as things or objects in a possible experience. But what is the empirical criterion of this necessary permanency, and with it of the substantiality of our perceptions,—on this the following articles will give us occasion to say what is required.

B. Second Analogy.

Primary Proposition of Time-Sequence on the Law of Causality.

All changes follow from the law of the connexion of cause and effect.

Proof.

(That all manifestations properly sequential in time are changes, or a successive being and non-being of the determinations of substance, which itself persists, and consequently, that a being following on a non-being, or a non-being on a being, in other words, a

coming to be or a ceasing to be, is, on the part of substance, only impossible,—this has been demonstrated under the proposition which immediately precedes. The same proposition might have been expressed thus: All vicissitude (succession) in the perceptions of sense is only change; for a coming to be or a ceasing to be on the part of substance were not a change of it, inasmuch as the notion of change presupposes the same subject as existing, and consequently as persisting, with two opposed determinations.—This being premised, we proceed to the proof.)

I perceive that perceptions of sense follow one another, *i.e.*, that there is a state of things at one time, the opposite of which preceded. I connect, properly, therefore, two perceptions in time. Connexion, now, is no deed of sense or the perception (general) of sense, but is the product of a synthetic act of imagination in that it determines inner-sense in regard of the time-relation. But imagination can connect said two states in two ways, either as that this shall precede that, or that this; for time cannot itself be perceived, or so, therefore, that, in its reference, as it were empirically, what precedes and what follows may, *in the object*, be determined. I am thus only conscious that my imagination puts the one first and the other second, not that *in the object* the one precedes and the other follows. In other words, the mere perception of sense leaves the objective relation of the consecutive affections of sense undetermined. In order, now, that this relation should be perceived as determined, the relation between the two states must be so thought that it necessarily determines which state shall be necessarily set first, and which second; and not reverse-wise. What notion, however, brings with it a necessity of synthetic unity can only be a category, and a category

is no element of the perception of sense as such. That here, now, is the notion of the relation of cause and effect, in which the former determines the latter in time as its consequent, and not as something that in imagination merely might precede (or even, indeed, not at all be). Only by this, therefore, that we subject the sequence of perceptions (and consequently all change) to the law of causality, is experience itself (empirical recognition of these perceptions) possible. These perceptions are themselves, then, only possible as objects of experience by virtue of this very law.[1]

The apprehension of the sensible complex is always successive. The perceptions of the parts of it follow on one another. Whether they also follow each other as in the object is a second point in the consideration which is not contained in the former. Of course we may name everything—every part-perception as well, so far as it is an item of consciousness—object; but what this word shall mean in the case of the intimations to sense, not so far as they are objects in respect of each being such mere intimation, but so far as they represent *an object*, that is a matter of deeper consideration. So far as they are objects of consciousness only in that they are the mere intimations to sense (the *part* perceptions), there is no distinguishing them from the apprehension of them, that is, from the mere susception of them in the synthesis of imagination. So far, it must be said, then, the sensible complex is, as in consciousness, always successively produced. Were objects things in themselves, no man would be able to decide, from the succession of the part-perceptions of their complex, how it was situated

[1] In the third sentence of the above paragraph, Rosenkranz has an "einerlei" that obviously ought to be a *zweierlei*.

with the synthesis of this complex *in the object.* For always we have only to do with our own units of sense; and how *things* may be in themselves (apart from the units of sense whereby they successively affect us), is wholly beyond the sphere of our cognition. Now, although objects to us are not things in themselves, and yet all that we can have given us to perceive, it is still necessary for me to demonstrate what that co-existent synthesis is that actually does infuse itself into the sensible complex of our consciousness, at the same time that this consciousness of said complex in apprehension is in all cases successive. Thus, for example, the apprehension of the sensible complex in the case of a house standing there before me is successive. Now, the question is, whether there is a succession of the complex of this house *itself and in itself.* No one will admit this. But, now, so soon as I consider what an object is to me in its transcendental meaning, then the house is not at all a thing in itself, but only an appearance in the affection of sense—a consciousness, therefore, of which the transcendental object is unknown. And the interest is to know, What do I mean by the question as to how it is situated with the synthesis of the complex in *the object itself* (which, of course, transcendentally, is still not a thing in itself)? Here that which lies in successive apprehension is considered an affair of mere consciousnesses, while that, again, which appears as the result that is given to me, although it is, in reality, nothing more than a sum of these consciousnesses, is considered the object of or before these consciousnesses, and with which my notion (my notion derived from the contents of apprehension) must agree. It is readily seen, now, that since truth is the agreement of cognition with its object, we can only

ask, in such a case, after the formal conditions of empirical truth; and that *what appears as the result which is given to me*, must, as compared with the successive units in apprehension themselves, only then be capable of being distinguished from these as the actual object of them, when the conjunct apprehension stands under a rule which distinguishes it from every other apprehension, and necessitates a specific synthesis of the relative complex. That, now, in the general result as it is before sense, which constitutes the condition of this necessary rule of apprehension, is the object.[1]

But, now, fairly to take up the problem before us. That something happens, *i.e.*, that something, or some state, comes to be, which previously was not, cannot be empirically perceived,[2] unless there were a something not this something, or a state not this state, preceding either. For an actual something which should ensue on a void time—an origination, that is, with no precedent condition of things—can just as little be apprehended as empty time itself. Said apprehension of an event, then, is an empirical per-

[1] I desire always to make Kant's meaning not only clear, but even, perhaps, so far as allowable, acceptable to the reader. Should this reader, then, have had troubles of late—now that Kant is attempting to bring all his principles together practically in use—I beg him not to lay the whole fault at the door of the translation. Kant in the *schematism*, as I believe, is always now, in effect, heatedly and confusedly, fighting against a difficulty that has, quite unexpectedly, come in at last. His first intention was to confine his "possibility of experience" to "space, time, and the elementary notions of the understanding;" but, in the end, for his principal categories, a second intention was forced upon him: that of admitting into said "possibility of experience," certain main facts of empirical suggestion. The "condition" above I do not think to mean any such fact, and yet Kant is so *various* now, that it is just possible it *may*.—See note, p. 304. (The "condition" meant is just the *category*.)

[2] *Wahrgenommen* alone means *empirically* perceived; so that Kant's own words here, "*empirisch wahrgenommen*," amount to the awkward tautology, *empirically empirically perceived.*

ception such that it ensues on another. Inasmuch, however, as this, so far, is but a succession, or, with all synthesis of apprehension, only so situated as the complex of the house was, there is no distinction so far of the one thing from the other. But I perceive also that if, in the case of an event, I call the first state empirically perceived A, and the subsequent one B, B can in the apprehension only follow A, while, for its part, A cannot follow, but only precede B. I see, for example, a ship driving down stream. My perception of its position down stream follows my perception of its position up stream; and it is impossible that, in the apprehension of these appearances, the ship should be first seen down stream, and afterwards again up. The order in the sequence of perceptions in apprehension is here, therefore, fixed, and to this order these perceptions are bound. In the previous example of the house, my perceptions in the apprehension of it could begin with the top and end with the bottom, or, equally well also, begin here and end there. They might, for that matter, quite as well also, apprehend the complex of the empirical object from right to left, or, again, from left to right. In the series of these perceptions, then, there was no fixed order—no order which necessarily prescribed where, in the apprehension, I should make my beginning, in order to convert its complex into the due empirical synthesis. Such necessity of rule, however, is always present in any case of an event, and the order of the consecutive perceptions (in the apprehension of the sensible facts) is thereby rendered *necessary*.

In this case, therefore, it is from the *objective suite* of the facts that I must infer the *subjective suite* in apprehension; for this latter suite (of mere units in

sense) is, as such, quite undetermined, and not discriminative as yet of object from object. It by itself decides nothing in regard to the synthesis of the complex *in the object*, for its order as yet is quite indifferent. The objective suite, on the other hand, will consist in the order of the perceived complex, according to which order the apprehension of what happens (as in the case of the ship) will follow what precedes by reason of a rule. Only so can I be empowered to say of the object itself, and not merely of my apprehension, that said object implies a consequence, which is as much as to signify that I can dispose my apprehension not otherwise than precisely in such and such order.

By reason of the necessity of such a rule, therefore, there must lie in the antecedent of an event the condition to a rule such that this event must, in consequence thereof, always and necessarily ensue; but, inversely, I cannot begin from the consequent, and thereby, in apprehension, determine what precedes. For from the subsequent point in time there is no going back of things to the preceding one, though referentially connecting itself, certainly, to some one or other that preceded. From a given time, again, the progression (on the part of things) to the specially following one is necessary. Accordingly, there being something that follows, I must necessarily connect it with something else that precedes, and of such a nature that it follows it in obedience to a rule, *i.e.*, necessarily; with the general result that the event, as what is conditioned, assuredly points to a condition, and that this condition is what determines the event.

Suppose we assume an event to be preceded by nothing which it is necessitated to follow according to a rule; then all succession of perception were

solely in apprehension, *i.e.*, merely subjective, and it were not at all objectively determined which perception must be properly considered antecedent and which consequent. We should have, so, only a play of intimations in consciousness that had no object in regard. In our perception, that is, no object would, so far as the relation of time is concerned, be distinguished from another; the reason being this, that, in our merely apprehending, the succession is always only indifferent, and there is nothing in the appearances determinative of them so that a certain consecution is thereby rendered objectively necessary. I am able to say, therefore, not that *in the object* two states follow the one the other, but only that one apprehension follows the other, which, of course, is something merely subjective and indeterminative of any object—such, then, that it cannot pass for the cognition of an object (even as *phenomenally* understood).[1]

[1] I cannot help offering to come to the reader's assistance here. There is so much repetition in all these words of Kant's that one cannot avoid suspecting that he is merely writing with the hope of gaining such time as will procure light for himself. He is now engaged in answering Hume—in demonstrating the single proposition that is fulcrum to the whole vast enterprise, the whole vast enterprise which seems already to require so little for its triumphant and definitive completion, and, do as he may, try back and back as he likes, turn up his box and shake out his principles with whatever anxiety and minuteness possible, the whole thing seems perpetually to have gone out of sight and to elude the very touch. Objects, namely, being for Kant only states of our own under the synthetic unity of a category, he requires to regard any sensation as a complex of units such that in it the order of these is in the first instance merely indifferent. Even in causality, consequently, he is obliged to assume that the facts are so. In the case of the ship, once the category has acted, we see the necessary order of the positions, and from that *objective* order we may infer that *subjectively* the positions, even while mere units of sense, were in precisely the same order. Otherwise, however, Kant would have us to understand that we should have found the order in said positions, while these were mere units of sense, absolutely indifferent. I assume the reader's difficulty to concern this indifference.

When we experience, then, something that happens, we always presuppose something to precede from which it follows according to a rule. For without this I should be unable to say of the *object* that it follows, inasmuch as the mere succession in my apprehension, if undetermined in connexion with something that precedes, through a rule, is no warrant for a consecution *in the object*. Consequently, therefore, it is always by reason of a rule—a rule by which objects are, through a preceding state, determined in their consecution, *i.e.*, in the manner in which they are a happening—that I make my subjective synthesis (as in mere apprehension) objective; and wholly under this presupposition alone is there even the possibility of the experience of something that happens.[1]

But, in the first place, how does Kant himself understand it? It is impossible to believe that he did not regard the empirical units of impression as coming in their own order. He cannot have supposed the various beds in a garden, or the various events in a battle as witnessed, but while both beds and events were mere units of impression on one's retina, or in one's sense, to have been in their order "*beliebig*" in this way, that we might set any one bed or any one event, or all the beds and all the events together, into what relative position and positions *we pleased*. That is all too manifestly absurd. We must assume his *indifference* ("*einerlei*") to mean, then—here especially where under causality the question is, and in every stage, of nothing but sequences—that the succession was merely a following *on*, until the action of the category converted it into a following *from*. But even that understanding the reader will find himself unable to accept at the hands of Kant. It is all very well for Kant to say with Hume that cases of causality are merely *matters of fact*, and that all matters of fact are, just as such, necessarily contingent. We tell Kant, for all that, that darkness follows the shutting of the shutter and light its opening, and that in no stage whatever was the order in the units of impression an indifferent one: that, in fact, even from the first there was only a necessity of order, and that without perception of that necessity we should have had no reason for setting the facts under the rubric of causality at all.

[1] So long as what concerns my knowledge of objects is confined to mere units of sensation as mere units of sensation, these are as yet only feelings in my sentiency, and, consequently, only subjective. This is the

It seems, indeed, as though this were in contradiction of every observation hitherto made in respect of the process in the exercise of understanding. For, according to such observations, only through perception and comparison of the concordant followings of many events on preceding states is it that we have been led to discover a rule in obedience to which certain events always follow certain states; and, consequently, only thus is it that we have been prompted to form the notion of a cause. But this notion would, on such a footing, be only empirical; and the rule, to which it gives rise, that everything that happens has a cause, would be just as contingent as experience itself. The universality and necessity of this rule were then only imputed, and would have no true apodictic validity, inasmuch as they would not be *a priori* established, but only through induction. It is situated here, however, as with other pure *a priori* elements (*e.g.*, space and time): we derive them as evident notions from experience only because we ourselves have first of all put them into experience, and only in this way, indeed, brought experience about. Certainly the logical undeniableness of such peculiar rule, determinative of the series of events and due to the notion of causality, is only then possible when we have made proof of it in experience; but a reference to it as condition of the synthetic unity of things in time was still the founda-

first step in perception to Kant and everybody else. The second step to Kant is that, these units being subsumed, through the schema, under the category, *experience* (objective recognition) is the result. This second step is the application of a "rule," then; and a rule, Kant held, was no product of mere sense. Afterwards he saw that the very units in sense had their *own* order, and, accordingly, he was compelled (in the *Prolegomena*) to postulate a rule subjective which was the *cue* to the rule objective.

tion of experience itself, and *a priori*, therefore, preceded it.

It is important, then, by actual example to demonstrate that, never even in experience, do we attribute (in the case of an event, where something comes to be which previously was not) the sequence to the object, and accordingly distinguish it from the subjective sequence of our mere apprehension, unless there be presupposed an underlying rule which compels us to observe *this* order in our perceptions rather than another. Nay, it is properly that compulsion (necessity) which alone makes possible the perception of a succession in the object.[1]

We have states of consciousness in us, of which, consequently, we may be aware. But let this our consciousness be as wide, and as minute, and as exact as it may, these states always remain that, and no more than that, *i.e.*, internal determinations of our own mind in this or that relation of time. How now do we come, in addition to that, to assume an object in or as these states of consciousness? Or, over and above the subjective reality of these states as modifications of our own sentiency, how do we

[1] The doctrine here clearly is that necessity and, consequently, objectivity are due to the *a priori* elements alone. We must not, then, be misled, when we read such a sentence as this, "*That*, in the conjunct presentation to sense, which supplies the condition of the necessary rule for apprehension, is the *object*" (see both text and note, p. 298), to infer that the condition to the rule (as it were the *cue* to it) lies for Kant in the empirical units. We have just been told that, did we proceed so, any necessity we might arrive at, would be only one of "induction" and "imputed." That point of view, indeed, is what is dominant in Kant: The necessity we ascribe to *matters of fact* cannot belong *a posteriori* to them, but must belong *a priori* to us. He handles such a tangled skein, however, that the "condition" to which he refers seems now to lie in the category, and again only in a *generale* of empirical suggestion as in the schema. The "subjective rule" (to precede the objective one) was, undoubtedly, his last shift here.

come to put in place of them I know not what objective reality? An objective value cannot consist in the reference to another idea (of that which we would name of the object); for then we have just the same question over again: How does this idea, for its part, again, go beyond itself and attain an actual objective value in addition to the subjective value which is proper to it as a determination merely of mind? When we examine what new quality *the reference to an object* extends to our own mere states, and what dignity they attain thereby, we find that this reference does no more than make the conjunction of these states, in a certain way, a necessary one, and this through subjection to a rule; or, inversely, that only because of a certain order in the time-relation of our own states of mind is it that an objective quality is imparted to them.[1]

In the synthesis of perceptions, the units of the complex so constituted always follow one another. So far there is as yet not any consciousness of an object; for through this following, common as it is to all apprehensions, there is not as yet anything distinguished from the rest. So soon, however, as I observe, or by anticipation assume, that there is in this following a reference to the preceding state on which state the present state ensues according to a rule, then I have something before me that so *happens*, or that is an event, *i.e.*, I perceive an object which I must set in time in a certain definite position —a position such that, in relation to what precedes,

[1] The reader's attention ought to be particularly awake to this paragraph. We have here Kant's admission that we can know only ideas within or states of our own, and that, consequently, his peculiar problem is, How does that which is manifestly subjective merely become objective? Kant's answer is his whole system; and that, also, is his answer to Hume.

it cannot be different. When I observe, therefore, that something happens, then there is implied in this, that, in the first instance, something precedes; for it is just in reference to such something that what is observed to happen gets its own relative place in time —gets to exist, namely, *after* a time in which it was not. But its definite time-place in this relation it can only get in this way, that, in the preceding state, there is presupposed something on which it always, and in obedience to a rule, ensues. From this it results, firstly, that I cannot invert the terms of the series—set what happens before that on which it ensues; and, secondly, that, the state which precedes once for all being, the particular event necessarily and inevitably ensues. In this way it is that there is an order in our states, such that in it what state is present (so far as it is a *become* state) points to some preceding state as its correlate, possibly indeterminate as yet, at the same time that this correlate refers itself determinatingly to the other as its consequent, and thus necessarily connects it with its own self in the time-sequence.

As, now, it is a necessary law of our sensibility, and, consequently, a *formal condition* of all our perceptions, that preceding time necessarily determines following time (I can get to the latter only through the former); so it is an indispensable *law of empirical perception* in time, that the occurrences of the past determine those of the future, and that these latter take place only so far as they are determined by the former, *i.e.*, follow them according to a rule. For it is *only by occasion of the things in time that we are able empirically to recognise this continuity in the connexion of times themselves.*[1]

[1] In the above paragraph Rosenkranz has a "jenes" which ought to be

For all experience and its very possibility, understanding is necessary, and its first respective action is, not to make the perception of an object *clear*, but simply *possible*. It effects this in this way, that it assigns the time-order to things and their existence, even in assigning to each of them, as a consequent, an *a priori* determinate place in time (it must *follow*) in regard of what (relatively) precedes. Without such determinate place, it (the effect) would not coincide with time itself, which imposes on all its parts their places *a priori*. This determination of place, now, cannot be derived from the relation of things to absolute time (for absolute time is not an object of perception at all); but, on the contrary, things themselves must mutually assign one another their time-places; they must make the place of each in the time-order necessary, in this way, namely, that what happens must, in obedience to a universal rule, follow its preceding state. In this way there comes to be a consequence in things, which, by means of understanding, effects and makes necessary precisely the same order and continuity of connexion in our possible perceptions as exist *a priori* in the form of internal perception (time), in which all our perceptions must have their places.[1]

a *jedes*. I may remark, also, that nothing in the paragraph really countenances the idea that the element of time, though all must obey its succession, contributes anything whatever to the *virtue* of causality.

[1] This paragraph is a very unsatisfactory one in more ways than one. Grammatically, for example, it is a very glaring instance of Kant's *laissez aller* in composition. There is a "dieselbe" which must refer very awkwardly back for any antecedent. Then there is "Reihe of perceptions" which determines order, etc., in a "Reihe" as something else of a "Reihe." As regards sense, though time is declared to be not an absolute object determinative of things, and these must determine each other; still causality is spoken of as reducing things into some coincidence with time itself. This may mislead us to mix up time itself in

That something happens, therefore, is a perception belonging to a possible experience, which experience becomes actual when what happens is regarded as determinately placed in time, and, consequently, as an object which can always be found in the context of perceptions as in accordance with a rule. This rule, now, determinative of something consequentially in time, is, that, in what precedes the condition is to be found, by virtue of which the effect always (*i.e.*, necessarily) follows. And so the proposition of a sufficient reason is the ground of possible experience, namely, of the objective recognition of events as regards their relation, consequentially, in the series of time.

The proof of this proposition depends wholly on the following moments. There is required for all empirical recognition, the synthesis of the complex through imagination, and that synthesis is always successive: the impressions in imagination follow, that is, the one the other. Imagination, however, does not at all determine the order (what *must* precede and what *must* follow). So far, then, the series of units in the successive impressions may be taken quite as well backwards as forwards. But if this synthesis is a synthesis of the apprehension of the complex of a given event, then the order is *objectively* determined, or there is an order in the succession determinative of an object, according to which order something must necessarily precede, and, it being, something else must necessarily follow. If, then, my perception is to contain the cognition of an event, of

the very virtue of causality. Kant, however, does not mean that ; but only that what is causally in time is peculiarly in time. Reciprocities are as much in time as, so to speak, causalities ; and Kant does not require to be told that.

something, namely, that actually happens, then this perception must be an empirical judgment in which it is thought that the sequence is determined, *i.e.*, that it presupposes something else in time on which it ensues necessarily or according to a rule. For were it not so, and if I assumed the antecedent, and the consequent did not of necessity follow, I should be forced to regard it as only a subjective sport of my imagination, and did I conceive something objective under it, I should be obliged to name it a mere dream. Wherefore the relation of impressions (as possible perceptions), according to which relation the consequent (what happens) is, through some antecedent, determined in its existence in time, necessarily and according to a rule—this relation (that of cause and effect) is the condition of the objective validity of our empirical judgments, in regard of the series of perceptions; and the condition, consequently, of the empirical truth of these, and therefore of experience. The principle of the causal relation in the succession of things, therefore, is valid for all objects of experience (being under conditions of succession), for this reason, that it itself is the ground of the very possibility of such an experience.

There comes in here a doubt, however, which must be removed. The proposition of a causal connexion amongst objects is, as now put, limited to successions of them, whereas we find that, in the actual use of it, it applies to consociations of things, and that the cause and the effect may both be together and at one and the same time. There is a warmth in this room, for example, which is not in the air without. I look round for the cause, and I perceive a heated fire-stove. Now this object as cause is at one and the same time with the warmth as effect. There is here, therefore,

as between cause and effect and in point of time, no relation of consecution in a serial form; the cause and the effect, namely, are here together and at once; and yet the rule holds good. Most natural causes, indeed, are at the same time as their effects, and any sequence on the part of the latter is only due to this, that the cause does not always realize the entire effect in a single moment. But the instant an effect is, it at once is with the causality of its cause, for if the cause had but a moment previously ceased to be, the effect never would have been at all. What is specially to be attended to here is, that the question is of the *order* of time, and not of its *lapse:* the relation remains, let there have been no lapse on the part of time at all. Time, as between the cause and its effect, may vanish, or these may simultaneously be; still the relation of the one to the other is determinable by a reference to time. The cannon-ball that lies on a cushion is, as cause, at once with the dint as its effect. Nevertheless I distinguish between them by means of the time-relation that, dynamically, connects them. For the cushion being smooth, I lay the bullet on it, and the dint follows. But if we invert the facts, and suppose the latter first, it is certain that a lead-bullet does not ensue on a dint in a cushion.

Accordingly, subsequence in time is certainly the only empirical criterion of the effect in relation to its cause, which, again, precedes. The glass is the cause of the water rising higher than the level of it, though both facts simultaneously co-exist. For suppose from a larger vessel I take water with the glass, a result ensues. There is a change of level, namely. The water, which in the larger vessel was level, has now risen above that level at the sides of the glass. That is, whereas the surface of the water was (in the

larger vessel) previously horizontal, it is now (in the smaller) concave (and this is due to the glass).

This causality leads to the notion of an *act* or *action*, as that again to the notion of *force*, on which the notion of *substance* follows. As I do not wish my *critical* business (which is occupied solely with the sources of synthetic cognition *a priori*) to be complicated with analyses (which concern, again, the mere elucidation, and not the extension, of our notions), I leave the circumstantial discussion of analytical results for a future *system* of pure reason. Not but what such analysis is already abundantly to be found in all the current relative text-books. Nevertheless, the empirical criterion of a substance, so far as it appears to manifest itself, not by the quality of permanency in objects, but better and more simply by that of action, I cannot help referring to now.

Where action is, and consequently efficiency and force, there also must be substance; and in it alone can we expect to find these conspicuous sources of phenomena. That sounds well; but when we want to explain what we understand by substance, and would at the same time avoid a vicious circle, we do not find it just so easy to do so. How is it that, from the action, we immediately infer the permanency, of the agent, this which is a property so essential and peculiar to substance (*substantia phænomenon*)? But, after the preceding, there is no such great difficulty in answering the question, quite insoluble as it may appear in the ordinary proceeding by the analysis of notions. Action already signifies the relation of the subject of causality to the effect of it. Inasmuch, now, as every effect consists in what takes place, and consequently in what is changeable, as represented in time by the fact of succession, the ultimate subject of

this change is, as substratum of all that changes, the element of permanency, *i.e.*, substance. For, on the principle of causality, actions are always the first ground of any change in objects: these actions, therefore, cannot lie in a subject that does itself change, because then there were required other actions and another subject as determinants of the change in it. From this it follows that action, as a competent empirical criterion, proves substantiality, without my requiring first of all to discover, through a comparison of perceptions, permanency in this criterion. Such discovery could not, in such manner, be effected, indeed, with that completeness which is required for the full and rigorous universality of the notion. For that the first subject of causality in all that comes or goes cannot itself (in the field of perceptions of sense) come and go, is a sure and certain conclusion pointing to empirical necessity and permanency in existence, and consequently to the notion of substance as phenomenal fact.

When something happens, the mere *happening*, without reference to *what* happens, is even in itself an object of consideration. The transition from the non-being of a state to this state itself, even supposing this state to be considered apart from any sensible quality, is alone a necessity to be inquired into. A coming to be or into existence of this nature does not (as already shown under section A) affect substance (for substance is not an affair of coming to be), but only its state. It is merely change, then, and not an origination out of nothing. When such origination is regarded as the effect of some different cause, it is called creation, which as a phenomenal fact is not possibly to be admitted, inasmuch as its very possibility would alone destroy the unity of

experience. At the same time, all things, if I regard them not as phenomena, but as things in themselves and as objects of understanding simply, are, notwithstanding that they are substances, capable of being considered dependent for their existence on some cause different from themselves; but this, again, would imply quite another use of words, and be inapplicable in regard of our things of sense as possible objects of experience.

How, now, there can be an alteration, simply as such; how there is the mere possibility that, on one state in one point of time, there can follow an opposite state in another—of that, *a priori*, we have not the least idea. There is required then a knowledge of actual forces which can only empirically be given; as, *e.g.*, of motive forces, or, what is the same thing, certain successive manifestations (say movements) which indicate such forces. But the *form* in every change—the condition under which alone it can take place in regard of a previous state (the subject of the change, or the particular state that is changed, being what it may)—consequently the succession of the states themselves (the bare process) is still capable of an *a priori* consideration in connexion with the law of causality and the conditions of time.[1]

When a substance passes from a state *a* into another state *b*, the time-point of the latter is distinguished from the time-point of the former, and follows it. The second state, again, is, as reality (in perception), distinguished from the first, as *b* is from zero. That is, were the difference of *b* from *a* only one of mag-

[1] It must be carefully observed here that I do not speak of the change of certain relations, but of that of a state. A body in uniform motion, for example, does not at all alter its state (of motion); but let the motion increase or decrease, and it certainly does alter its state.—K.

nitude, the change were still a production of $b-a$, a result which previously was not, and in regard of which the previous state a is really $= 0$.

The question is, then, How does a thing pass from a state $= a$ into another $= b$? Between two moments of time there is always a time, and between two states in these moments there is always a difference, which difference has a certain magnitude (for all the parts of objects are always quantitative). Every transition from one state to another, therefore, takes place in a time which lies between two moments, the first of which is determinative of the state *from* which a thing passes, and the second of the state *into* which it passes. Both, then, are limits of the time of a change, and consequently of the interval between the two states. Both, as such, form part, then, of the entire change. Now, every change has a cause which, during the whole time of the change, realizes its causality. This cause, then, brings its change forward not suddenly (at once, or in a moment), but in such manner in a certain time that, as the time increases from its beginning in a to its completion in b, so there is also generated, through all the smaller degrees between the first and the last, the magnitude of reality $(b-a)$. All change, consequently, is only possible through a continuous operation of causality, in which, so far as it is uniform, each step is called a moment. The change does not consist of these moments, but is generated by them as the effect of them.

That, now, is the law of continuity in all change, and it founds on this, that neither time, nor any perception in time, consists of parts which are the smallest possible, and yet that, in the case of a change, the state of a thing passes through all these parts, as elements, into its second state. No difference

of the *reale* in perception, as no difference in the magnitude of times, is the smallest possible; and the new state of reality increases from the first step (in which this reality was as yet not), through all the infinite degrees of it (the reality), between which degrees the differences of the one from the other are smaller than the difference between 0 and *a*.

What advantage this may have for the investigation of nature, does not concern us here. But how such a proposition, which appears to enlarge so much our knowledge of nature, should be completely *a priori* possible, that very expressly demands consideration on our part, however much the very first sight of it may seem to prove that it is true in fact, and however much we may seem entitled to believe the question of its possibility superfluous. For there are so many unfounded pretensions to an enlargement of our knowledge by means of simple reason alone, that we must take it to us as a general principle to mistrust such, and, in the absence of documents thoroughly justificative, to believe and accept nothing of the kind, even on the very clearest dogmatic proof.

All increase of empirical cognition, as every advance in perception, is nothing but an enlargement of the determination of inner sense, *i.e.*, a progression in time, let the objects be as they may, perceptions pure or perceptions sensible. This progression in time determines everything, but is itself no further determined by anything, *i.e.*, the constituent parts of it are only given in time and through the synthesis of time, but their synthesis is not before time. Hence every transition in perception to something that follows in time is a determination of time through production of this perception and, as time is always and in all its parts a magnitude, through production

of a perception as a magnitude throughout all its infinitesimal degrees from zero up to the degree actual. In this way we have the possibility of *a priori* cognising a law of changes, so far as concerns their form. We anticipate only our own apprehension, the formal condition of which, inasmuch as it exists in us before entrance of any object, must certainly be capable of becoming *a priori* known.

Time, then, is the *a priori* sense-condition of the possibility of a continuous progression from what is to what follows. And, in the same way, understanding also, by virtue of the unity of apperception, is the condition *a priori* of the possibility of a continuous determination of all positions for objects in time, through the series of causes and effects, where the earlier infallibly involve the later, and thereby render the empirical cognition of the relations in time universally and objectively valid.

C. Third Analogy.

Primary Proposition of Simultaneity in accordance with the Law of Reciprocity or Community.

All substances, so far as they may simultaneously be perceived in space, are in thoroughgoing reciprocity.

Proof.

Things are simultaneous when, in empirical fact, the perception of the one can follow on the perception of the other, and *vice versa* (which, as has been just shown under our second primary proposition, cannot possibly take place in the case of the time-*consecution* of perceptions).[1] Thus, I may first look at the moon

[1] Any reader who fancies that he has just seen all things bound together into an iron unity by causality alone, must be startled to be re-

and then at the earth, or, contrariwise, first at the earth and then at the moon, and just because the perceptions of these objects may reciprocally follow each other, do I say that they exist simultaneously. Simultaneity, now, is the existence of the whole of a complex at one and the same time. But it is not possible to perceive time itself, in order to infer from the fact of things being in the same time, that the perceptions of these may reciprocally follow one another. The synthesis of imagination in apprehension would bring forward, therefore, each of the perceptions as only of such a nature that it is present in the subject when the other is absent, and so contrariwise; but not that the objects are simultaneous—not so, that is, that when the one is the other also is, and that such is necessarily the case in order that the perceptions should be able reciprocally to follow each other. There is consequently required a notion of understanding for the reciprocal series of the determinations of things existent there, apart from each other, and yet simultaneously, in order to say that the reciprocal succession of the perceptions is one that takes place in the object, and thereby demonstrate the simultaneity as objective. But now that relation of substances, in which the one is the subject of determinations that have their ground in the other, is the relation of *influence*—a relation that, where this determines that and that this, is known as the relation of community or reciprocity. The simultaneity of sub-

minded here, that all objects or perceptions, sensible or pure, are to Kant, as each is a *Mannigfaltiges*, each also a succession in time, yet that this succession is not always irreversible or causal, but may, as is emphatically declared by Kant himself also, be reversible and reciprocal, etc. Obviously, then, Kant has had in view heretofore the necessity of the causal *relation* only, and only in regard of its own appropriate empirical antecedents.

stances in space, therefore, is not capable of being otherwise cognised in experience than under presupposition of their reciprocal influence the one on the other, and, consequently, just such reciprocal influence is the condition of the possibility of things themselves as objects of experience.

Things are simultaneous so far as they exist at one and the same time. By what do we know, however, that they *are* in one and the same time? When, in the synthesis of apprehension, the order of such complex is indifferent—when it may proceed, that is, from A, through B, C, D, to E, or, reverse-wise, from E, through D, C, B, to A. For were this order an order of simple consecution in time that, beginning in A, concludes in E, it would be impossible to begin the apprehension of perceptions from E and go back again to A, because in that case A would be an affair of past time, and not, consequently, any longer an object of possible apprehension.

Let us suppose now, that, in a complex of substances as units of sense, each were absolutely isolated, and not one among them the subject of action and reaction in regard of the others, then I say that the simultaneity of these would be no object of a possible perception, and that the existence of the one could not by any path of empirical synthesis conduct to the existence of the other. For, when it is considered that they would, in effect, be subjects of a separation absolute, it will be understood also that perception, still conceived capable of passing from the one to the other in time, would successively, indeed, determine the existence of each, but be wholly unable to distinguish whether the one were objectively *after* the other or objectively *along with* it.

There must, therefore, be something besides mere

existence that enables A to determine for B its place in time, and as well, at the same time, B so to determine A; for only under such a condition is it possible to conceive of substances as empirically co-existent. Now, only that determines for something else its place in time which for this latter is cause, or cause of its modes. Every substance, therefore, must (as it is a consequent only on account of what is determined in it) be the subject at once of the causality of certain determinations in the other, and of the effects of that other's causality in determination of its own self, *i.e.*, they must (directly or indirectly) stand in dynamical unity, if ever the fact of their co-existence is to be possibly perceived in experience. Now, in regard of the objects of experience, every condition is necessary without which experience of these objects themselves would be impossible. It is necessary, then, for all substances in perception, so far as they are simultaneous, to stand, one with the other, in a thoroughgoing community of reciprocity.

The word community is, in our language, ambiguous, and may mean as well *commercium* as *communio*. We use it here in the former sense as importing a dynamical community without which even the local one (the *communio spatii*) would never be capable of being empirically perceived. It is easy to observe from our own experience that only the continuous influences in all parts of space can lead our perception from one object to another. The light, for example, that plays between our eye and the bodies in space effects a mediate community between us and them, and demonstrates thereby the simultaneity of these. Nor, again, can we empirically change our position, or rather perceive such change, without universal matter rendering it possible for us to become aware

of our new position, at the same time that, only by means of the reciprocal influence of its elements, it is, that this matter is able to demonstrate the simultaneity of these, and thereby the co-existence of even the remotest of them. Without community every one perception (of the phenomena in space) would be sundered from the other, and the chain of empirical cognitions, *i.e.*, experience, would, in the case of every new object, have to begin quite afresh, without possibility of any previous one being in the least connected with it or standing along with it in the relation of time. I do not mean by this to deny the fact of a vacuum in space; for that may exist where no perceptions reach, and where, consequently, no empirical observation of simultaneity takes place. In such circumstances, however, it is no object whatever for any possible experience of ours.

In illustration the following may serve. All perceptions must, as belonging to a possible experience, stand in our mind in the community of apperception. So far, also, as the objects are to be perceived conjoined in a simultaneity of existence, they must mutually determine their places in one and the same time, and thereby constitute a whole. If this subjective community, now, is to rest on an objective ground, or be referred to objects as substances, the perception of these must, as ground, make the perception of those possible, and so *vice versa*, in order that consecution, which is a necessary character of perceptions as apprehensions, may not be ascribed to the objects, but that these, on the contrary, may be perceived together and at once. This implies, however, a reciprocal influence, *i.e.*, a real *commercium* of substances, without which the empirical relation of simultaneous existence would be impossible in expe-

rience. Through this *commercium*, objects, so far as they stand in externality the one to the other, and yet in connexion, constitute a *compositum reale*, and such *composita* are possible in many ways. The three dynamical relations, therefore, from which all the rest follow, are that of Inherence, that of Consequence, and that of Composition.

* * * * *

These, then, are the three analogies of experience. They are nothing but principles determinative in regard to the existence of objects in time, of which they follow the three *modi:* the relation *to* time itself as a magnitude (the magnitude of existence, *i.e.*, duration); the relation *in* time as a consecution; and lastly, the relation of time as a sum of all existence at once. This unity of time-determination is altogether dynamical, *i.e.*, time is not regarded as something in which experience directly determines for each existence its own place, which is impossible, inasmuch as absolute time is not an object of the perception of sense, whereby things might, as it were, be kept together; but the rule of understanding, by which alone it is possible for the existence of objects to get synthetic unity in accordance with the relations of time, determines for each of these objects its relative place in time, and that, too, *a priori* and as valid always.

By *Nature* (in an empirical sense) we understand the context of existent objects as submitted to necessary rules or laws. There are, therefore, certain laws, *a priori*, which alone render a nature possible. Empirical laws can only be found (or exist) by means of experience, and that, too, as submitted to said primary laws which alone render it possible. Our analogies, therefore, exhibit, properly, the unity of nature in the connexion of all things under certain

exponents, which exponents express nothing else than the relation of time (so far as it is sum of all existence) to the unity of apperception, which unity can exist only in a synthesis on rules. They collectively say, then, All things are, and must be, in a one nature, for without such *a priori* unity there would be no unity of experience, and consequently no determination of objects in experience.

As regards the mode of proof, however, of which we have availed ourselves in the case of these transcendental laws of nature, and with reference to its peculiarity, there is one observation to be made which, as a prescript for every other attempt to prove intellectual and synthetic *a priori* propositions, will have its own importance. Had we attempted to prove these analogies dogmatically or from notions,—namely, that all that exists depends only on what is permanent; that every event presupposes something previous from which it follows according to a rule; that in things which are simultaneous, their states co-exist in mutual co-reference according to a rule,—then every effort would have been all in vain. For it is not possible for us to get from one object, and its existence, to the existence, or the mode to exist, of another object, merely by the aid of ideas of these things, let us analyze them in what manner we may. What, then, was left us? The possibility of experience, if to be a cognition, in which all objects at last must be capable of being given us, so far as their perception is to have for us objective validity. In this *tertium quid*, now (the essential form of which consists in the synthetic unity of all apperception of the matter of apprehension), we found *a priori* conditions of the universal and necessary time-determination of all existence as in said matter of apprehension,

without which conditions even empirical time-determination would be impossible. Rules also we found of synthetic unity *a priori*, by means of which we were able to anticipate experience. In absence of this method, and in the craze dogmatically to try to prove synthetic propositions which an empirical exercise of understanding recommends as its principles, it has happened that there has been so often and so vainly sought a proof of the proposition of sufficient reason. Of the other two analogies, it has occurred to nobody to think; although, for all that, there was no want of their silent adoption. The reason of this lay in the want of the clew of the categories, which clew is alone able to discover and demonstrate every blank of the understanding as well for notions as judgments.[1]

4. The Postulates of Empirical Thought in General.

1. That is *possible*, which coincides with the *formal* conditions of experience (in pure perception and categories).

2. That is *actual*, which is in the context of the *material* conditions of experience (sensation).

3. That is *necessary*, or necessarily exists, the connexion of which with actuality is determined in accordance with the *universal* conditions of experience.

[1] The unity of the universe which comprehends all things is evidently a mere inference from the silently assumed proposition of the community of all substances which are simultaneous. For were these isolated, they would not constitute parts of a whole; and if their connexion (reciprocity in the complex) were not already necessary for the sake of co-existence, we should be unable to conclude from this simultaneity as a mere ideal relation to their reciprocal connexion as a *reale*. In its place we have proved that community is, properly, the ground of the possibility of an empirical perception of co-existence, and that, therefore, we, properly, only reason back from the latter to the former as its condition.—K.

Exposition.

The categories of modality have this peculiarity, that they do not in the least increase the notion to which they are predicatively annexed, as determination of the object, but only express the relation to the cognising faculty. The notion of something, namely, being itself quite complete, I can still ask whether this something is merely possible, or actual, or necessary as well as actual? But, so, there is not any further determination thought in the object itself. The question, rather, is only how does this object (with all its determinations) relate itself (1) to *understanding* and the empirical exercise of understanding, (2) to empirical *judyment*, and (3) to *reason* (as applied to experience).

The primary propositions of modality, therefore, are no more than definitions of the notions of *possibility*, *actuality*, and *necessity*, so far as they are applied to experience, and so far, consequently, as they are at the same time restrictions of all the categories to an employment and application only empirical, and never transcendental. For, if they (the categories) are to have more than a logical import, analytically expressive of the form of thought—if they are to concern things and the possibility, actuality, and necessity of things, they must relate to possible experience and its synthetic unity, in which alone there are for cognition given objects.

The postulate of the possibility of things demands, therefore, that the notion of these should be in agreement with the formal conditions of experience as such. But experience as such, or the objective form of experience generally, includes all synthesis that is required for the perception of objects. A notion is to be held void and without objective reference, if,

even though possessing synthesis, this synthesis does not relate to experience, either as borrowed from it (and then it is an *empirical notion*), or such that on it, as *a priori* condition, experience, or the form of experience, rests (and then it is a *pure notion*—that relates to experience, all the same; for only in experience is there an object to be found for it). For, where shall we find the character of the possibility of an object that is to be thought through an *a priori* synthetic notion, unless in the synthesis which constitutes the form of the empirical perception of objects? That in such a notion no contradiction should be thought, is indeed a necessary logical condition, but not enough by far for the objective reality of the notion, *i.e.*, for the possibility of such an object as is thought in the notion. Thus, there is no contradiction in the notion of a figure which is inclosed by two straight lines, for the notion of two straight lines and the meeting together of them involve no negation of a figure. The impossibility does not depend on the notion in itself, but on the construction of it in space, *i.e.*, on the conditions of space and the determinations of space. But these, again, have their own objective reality, *i.e.*, they relate to possible things, because they *a priori* imply the form of experience.

And now we shall show the extensive use and influence of this postulate of possibility. If I conceive something that is permanent, in such wise that all that changes belongs merely to its state, it is impossible for me, from such notion alone, to discover that any such thing is also possible. Or, let me conceive something which is to be of such a nature that, it being, something else always and inevitably follows it. So far, certainly, it is possible, without contradiction, to think this. But whether such a virtue (as

causality) is to be found in anything possible, cannot be decided from that alone. Finally, I can conceive several things (substances) of such a nature that the state of the one has for necessary consequence a state in the other, and also *vice versa*. But whether such a relation can have place in things, it is impossible to make out of the notions themselves, involving as they do a merely supposititious synthesis. Only by this, then, that these notions express *a priori* the relations of our perceptions in every experience, do we perceive their objective reality, *i.e.*, their transcendental truth. This, too, indeed, independently of experience, but still not independently of all reference to the general form of experience, and to that synthetic unity in which alone objects can be empirically perceived.

Would we conceive for ourselves, as in reference to the matter given us in perception, some entirely new notions of substances, forces, re-actions, without appealing to experience for examples of such connexions, we should find ourselves in presence of mere maggots of the brain, for the possibility of which there is no evidence whatever, because we do not apply to experience to inform us of them, nor derive from it the notions of them. Such imaginary notions cannot bring with them a character of possibility in the same way as the categories, *a priori* conditions on which all experience depends. They can only pretend to be of *a posteriori* validity, and such as are to be supposed given by experience. Their possibility, in truth, must be either *a posteriori* and empirically made good, or it cannot be at all cognised. A substance, which is permanently present in space, but without occupying it (like that middle-thing between matter and mind which some have suggested); or a special faculty of the mind to *see* the future

beforehand (and not simply to infer it); or, finally, another such faculty to stand in a communion of thoughts with other men (no matter how distant): these are notions, the possibility of which is entirely groundless, because it cannot be established on experience and the known laws of experience; without these it is a mere arbitrary construction of thought, which, though it imply no contradiction, cannot make any claim, nevertheless, to objective reality, or to the possibility of an object that is to be thought in it. Whatever has claim to reality precludes of itself our thinking it *in concreto* unless we have called in experience to our aid; for, as such, it can only relate to sensation which is the matter of experience, and is no affair of a mere form of relation, with which, indeed, it is always possible for us hypothetically to play.

But I dismiss from consideration here everything the possibility of which can only be made out from its actuality in experience, and regard only the possibility of things so far as dependent merely on *a priori* notions. Now of such things I repeat that they can never be realized from these mere notions alone, but that they must be always regarded only as formal and objective conditions of experience.

One might be tempted to think, indeed, that the possibility of a triangle might be discovered from its mere notion (it is certainly independent of experience); for, in point of fact, we can give it an object, *i.e.*, construct it, entirely *a priori*. But as this construction concerns only the form of an object, such notion would remain still a mere product of imagination, and, consequently, the possibility of an object for it would be still doubtful, more being required in that respect: namely, that such a figure (the construction) should be thought in connexion with all

the conditions under which every object is supposed to stand in experience. That, now, space is a formal condition *a priori* of external experiences—that precisely the same formative synthesis, by which we construct a triangle in imagination, is of identical nature with that synthesis which we effect in the apprehension of a sensible object in order to realize an empirical notion of it—it is that alone which connects with said notion the further conception of the possibility of such a thing. And thus—just because the relative notions are all synthetic—thus it is that the possibility of continuous magnitudes, nay, even of magnitudes as such, is clear to us, never from notions themselves, but only from these as formal conditions of the determination of objects, generally, in experience. Where, indeed, should we seek to look for objects which should correspond to the notions, if not in experience, in and by which alone objects are given to us? At the same time it is true also, that, even without premising experience itself, we are quite able to discover and characterize the possibility of things—merely in reference to the formal conditions under which, quite generally, anything gets determined as an object in experience, but still only as referred to experience, and within the limits of experience.

The postulate that bears on the *actuality* of things, demands *perception of sense*, and that is *sensation*, of which we must have a consciousness, not indeed necessarily immediately with reference to the object itself, the existence of which is to be recognised; but still we must be aware of its connexion with some actual perception, as in obedience to the analogies of experience which exhibit, generally, every real connexion in experience.

In the mere notion of a thing there comes forward

no character of its existence. For, though such notion be so complete as to want nothing whatever that is required for the thinking of a thing with all its inner specificates, still existence has nothing to do with all that, but only with the question: Whether such a thing is given to us, and in such manner that the perception of it may at all times precede the notion of it? For that the notion precedes the perception, signifies its mere possibility. Whereas the perception of sense which adds matter to the notion is the sole and single character of actuality. Still, even before perception of a thing, and thus comparatively *a priori*, we may come to know the existence of this thing, should it but connect itself with actual perceptions, and in accordance with the principles of the empirical conjunction of these—that is, in accordance with the analogies. For then the existence of the thing really coheres with our perceptions in a possible experience, and, led by the analogies, we may get from our actual perception to the thing itself in the series of possible perceptions. Thus, we know the existence of a magnetic matter pervading all things, from the perception of the attracted filings of iron, although any direct perception of this matter is, from the nature of our organs, impossible to us. For, following the laws of sense and the context of our perceptions, we should hit, even in experience, on the direct empirical perception of it, if only our senses were fine enough, the consideration of their coarseness nowise concerning the form of possible experience. Wherever perception, then, and its implications according to empirical laws reach, so far reaches also our knowledge of the existence of things. But if we do not begin from experience, or proceed according to the laws of the empirical context of

things, all our attempts are vain to divine or detect the existence of anything whatever.[1]

As concerns the third postulate, lastly, its business is with the material necessity in existence, and not with the merely formal and logical necessity that lies in the connecting of notions. As, now, no existence of the objects of the senses can be recognised fully *a priori;* still, nevertheless, comparatively *a priori* as in relation to some other existence already given; but even then only such an existence as must be capable of being actually met with somewhere in the context of that experience of which the given perception forms part: so, necessity of existence can be cognised, never from notions, but always only from the connexion, according to general laws of experience, with that which has been perceived.[2] Now, there is no existence which, under condition of other given perceptions, might be cognised as necessary, except, according to laws of causality, the existence of effects from given causes. Consequently it is not the existence of things (substances), but that of their state, in regard to which we can alone recognise necessity; and that, too, only according to the laws of causality, from other states which are given in perception. It follows from this, that the criterion of necessity lies solely in the law of possible experience, according to which every event has from its cause a determination of an *a priori* force. Hence we cognise the necessity only of those effects in nature, the causes of which are given us, and the character of necessity in existence extends no farther than the

[1] Simply as, so far, hardly relevant, and not as wishing to indicate a judgment, I omit here the "Refutation of Idealism" which Kant intercalated in his second edition.

[2] The last word, "können," in this sentence, is a manifest slip of the pen.

field of possible experience. Even here, indeed, it is not to the existence of things as substances that it relates; because substances can never be regarded as empirical effects, or as something that happens and takes birth. Necessity concerns, therefore, only the relations of the perceptions according to the dynamical law of causality, and the possibility that is founded on it of concluding *a priori* from some given existence or other (a cause) to another existence (an effect). Every event is hypothetically necessary. That is a proposition which subjects change in the world to a law, namely, to a rule of necessary existence, without which nature would not be even possible. Hence the proposition, nothing happens from blind chance (*in mundo non datur casus*) is an *a priori* law of nature. So also that no necessity in the world is blind, but conditioned, and consequently intelligible (*non datur fatum*). Both are laws such that through them the play of changes is subjected to a *nature of things* (as objects of sense), or, what is the same thing, to the unity of the understanding, in which alone they can belong to an experience as the synthetic unity of perceptions. Both of these propositions are of the dynamical class. The former is properly a consequence of the proposition of causality (under the analogies of experience). The latter belongs to the propositions of modality, which (modality) adds to the causal determination further the notion of necessity, but as placed under a rule of the understanding. The principle of continuity forbade, in the series of changes, any interruption (*in mundo non datur saltus*), but any gap or cleft, as well, between two perceptions in the totality of empirical objects in space (*non datur hiatus*); for we may so express the proposition that nothing can come into experience

which would indicate a vacuum, or even only admit it as part of the empirical synthesis. As regards a vacuum, indeed, that may be supposed beyond the field of possible experience (the world), such does not come under the jurisdiction of mere understanding, which only decides on questions concerning the use of given objects for empirical cognition. It is a problem for reason in the field of *the ideas*, which transcends the sphere of possible experience and would decide on what circumscribes and limits experience itself. That, then, is a consideration for the *transcendental dialectic*. These four propositions (*in mundo non datur hiatus*, *non datur saltus*, *non datur casus*, *non datur fatum*), and all other propositions of transcendental derivation as well, we might easily expound in their order, following that of the categories, and assign each its place; but the initiated reader will now do this for himself, or easily find the clew to it. They are all there solely for this, that, in the empirical synthesis, nothing is to be admitted which could interrupt or infringe understanding and the continuous coherence of all perceptions, *i.e.*, the unity of its notions. For it is in understanding alone that the unity of experience (in which all perceptions must have their places) is possible.

Whether the field of possibility be of greater extent than that where all actuality is comprised, which again shall exceed that where what relates to necessity is comprised—these are interesting questions, and of synthetic solution, but amenable only to the jurisdiction of reason. What they would say, namely, is whether all things, as objects of sense, belong to the totality and context of a single experience, of which every given perception is a part, which cannot, therefore, be connected with other such objects, or whether

my perceptions may belong to more than one possible experience (in its general connexion). Understanding *a priori* extends to experience only the rules, dependent on the subjective and formal conditions, as well of sense as apperception, which rules alone make experience possible. Forms of perception other than space and time, and forms of understanding other than the categories (were such even possible), we are wholly unable to conceive or render intelligible to ourselves. Nay, were this really possible, these same forms would have no place in experience, which, however, is the single and sole element in which objects are given us. Whether other perceptions than those which belong to our general possible experience, and whether, therefore, there can possibly ever exist a quite other field of matter—these are questions beyond the power of understanding to decide; which, for its part, has only to do with the synthesis of what is given. In all other respects the poverty of our usual reasonings for the realizing of a wide realm of possibility, with the actual (every object of experience) as only a small part of it, is very striking. All that is actual is possible. From this there follows naturally, according to the logical rules of conversion, the merely particular proposition, something possible is actual. But this, again, only seems to signify as much as, that there is a great deal possible which is not actual. It even sounds as though the amount of the possible were thereby capable of being expressly extended beyond that of the actual, inasmuch as something must still be added to the former in order to constitute the latter. But this addition to the possible is to me unknown. For what were to be supposed added over and above to it, would be impossible. There can be added to my understanding only something

more than the fact of simple agreement with the formal conditions of experience, connexion, namely, with some actual perception or other; and whatever is, according to empirical laws, the subject of such connexion, that is actual, though it may not be immediately perceived. But that there is, in complete coherence with what is given me in perception, the possibility of another series of perceptions, and consequently more than a single all-embracing experience, cannot be inferred from anything given us, and still less were we to suppose nothing given us; for there is nowhere anything thinkable that is without matter. What is possible only under conditions which are only themselves possible, is not possible *in every point of view.* But it is in that sense the question is taken when we would know whether the possibility of things stretches farther than experience can reach.

I have made mention of these questions merely to leave no gap in what is usually considered to belong to categories. In point of fact, however, absolute possibility (or such as is valid in every point of view) is no mere notion of the understanding (category), and cannot in any way be of empirical application, but belongs only to reason as in transcendence of all possible empirical application of the understanding. Hence here we have necessarily to content ourselves with a mere critical remark, but for the rest to leave the thing in its own obscurity till the further discussion that will follow.

As I will now bring this fourth number to a close, and with it the entire system, as well, of all the primary propositions of pure understanding, it is incumbent on me to explain why I have named the principles of modality precisely postulates. I shall not take this expression in the meaning here, which

some more recent philosophical authors have given it in opposition to that of the mathematicians, to whom it properly belongs, namely, that to postulate is as much as to assume, without justification or proof, a proposition as immediately certain. For, should we admit in the case of synthetic propositions, let them be as evident as they may, that, on the mere aspect of their peculiar burden, and without deduction, we may unconditionally accept them, then all critique of the understanding were a lost labour. In that case, indeed, as there is no want of the hardiest assumptions, not to be denied even by common belief (which, however, is no creditive), our understanding will stand open to every craze, without power to refuse its assent to even illegitimate propositions which demand, in precisely the same tone of assurance, to be admitted as actual axioms. Whenever, therefore, there is added to the notion of a thing an *a priori* synthetic determination, then for such a proposition there is indispensably necessary, if not a proof, at least a deduction of the legitimacy of its import.

The propositions of modality, however, are not objectively synthetic, inasmuch as the predicates of possibility, actuality, and necessity do not in the least increase the notion of which they are enunciated by adding anything to the conception of the object. Inasmuch, nevertheless, as they are synthetic, they are only subjectively synthetic, *i.e.*, they conjoin with the notion of a thing (a *reale*), of which itself they say in other respects nothing, the cognitive faculty in which it originates and has its seat. That is, they effect this so that, when, merely in understanding, the notion is in connexion with the formal conditions of experience, its object is possible; while, when it is coherent with perception (sensation as

matter of sense), and through perception further determined by understanding, its object is actual; and, lastly, when the notion is determined on categories as regards the context of perceptions, its object is necessary. The propositions of modality, therefore, predicate nothing else of a notion than the action of the cognitive faculty whereby it is produced. Now a mathematical postulate is a practical proposition which concerns nothing but the synthesis by which we first give ourselves an object, and create for ourselves a notion of it, as, *e.g.*, with a given line and a given point, to describe a plane circle: such a proposition cannot be proved, and just for this reason, that the procedure required is precisely that whereby we first of all create the notion of such a figure. Accordingly, in the same manner and with the same right, we are authorized to postulate the propositions of modality, because they do not increase their notion of things, but only indicate the manner in which said notion is united with the cognitive faculty.[1]

General Remark on the System of Primary Propositions.

It is something very remarkable that we cannot see into the possibility of anything with the mere category; but that we must always have a perception by us whereby to demonstrate the objective reality of the category. Let us take, for example, the

[1] By the *actuality* of a thing, of course, I imply more than its possibility, but not in the thing; for that can never contain more in actuality than was contained in its complete possibility. But, as its possibility was merely a position of the thing in relation to the understanding (empirically applied), its actuality is a connexion of it, as well, with perception.—K. In effect, with Kant, possibility means at times actuality. To demonstrate the possibility of something is to demonstrate its actuality, as in the case of the proofs for the existence of God.

categories of relation. It is impossible to understand from mere notions how, 1, something can exist only as subject, not as mere modus of other things, *i.e.*, be substance; or how, 2, something must be because something else is—be a cause, consequently; or how, 3, in the case of several things, something should eventuate, from the fact of one of them being given, to the rest of them, and *vice versa*, so that there should be such a thing as a community of substances. Nay, precisely the same thing holds of the other categories, *e.g.*, how one thing, together with many, may be of one sort, *i.e.*, be a quantity, etc., etc. So long, then, as perception is absent, it is impossible to know whether there is an object thought in the categories, or whether at all an object can anywhere be found for them. And from this it is evident that, alone and by themselves, they are not cognitions proper, but mere thought-forms, there only to make cognitions proper of given perceptions of sense. Hence it is that no synthetic proposition can be constructed from mere categories. For example, in every existence there is substance, something, that is, that can exist only as subject and never as simple predicate; or everything is a quantum. In all such cases there is nothing to enable us to pass beyond a given notion and connect with it another. Hence, also, there has never been any success for the attempt to prove a synthetic proposition by bare categories, as, *e.g.*, the proposition, that everything contingently existing must have a cause. Here there is no getting any further than to prove that, without this relation, it is impossible for us to *comprehend* the existence of what is contingent, *i.e.*, *a priori* to acknowledge through the understanding the existence of anything such. But it does not follow that precisely this relation in ques-

tion is the condition of the possibility of things themselves. If we recur, then, to our proof of the proposition of causality, we shall find that it was not possible for us to effect this unless for objects of possible experience. We shall find that we were so situated, indeed, as to be able to prove this proposition (all that happens, every event, presupposes a cause) only as a principle of the possibility of experience, consequently of the cognition of an object given in empirical perception, and not from mere notions. Nevertheless that the proposition, all that is contingent must have a cause, will be clear to every one from notions only—that is not to be denied. But then the notion of contingency is already so understood that there is involved in it, not the category of modality (as something the non-being of which were thinkable), but that of relation (as something that can exist only as consequence of something else); in which case, plainly, it is no more than the identical proposition, what can exist only as effect has its cause. In point of fact, should we wish to give any actual examples of contingent existence, we must always refer to *changes*, and not merely to the possibility of thinking an *opposed state*.[1] But a change is an event,

[1] It is easy to think the non-existence of matter; but the ancients did not infer from that its contingency. Nay, the very alternation of the being and non-being of a given state of something (and all change consists in that) is, as regards this state, no proof as it were from its opposite. For instance, rest in a body, following on motion in it, is no proof of the contingency of the motion in it for the mere reason that the former is the opposite of the latter. For here this opposite is only, logically, not really opposed to the other. We must prove that, instead of the preceding motion, it was quite possible for there to have been, on the part of the body, rest, if we would prove the contingency of the motion. It is not enough that the rest followed; for it is quite possible for both states to be, consistently with each other.—K.

Rosenkranz has in this note, by slip of pen or printer, "Verbindung" instead of the *Veränderung* that ought to be.

which, as such, being only possible through a cause, is such that in itself its non-being is consequently possible; and so it is that, from something being able to exist only as the effect of a cause, we recognise contingency. Hence, on assumption of something as contingent, it is an analytical proposition to say, it has a cause.

Still more remarkable is it, however, that to understand the possibility of things as following the categories, and thus to demonstrate the objective reality of these, we require not merely perception, but even always also *external perceptions*. If, for example, we take the categories of relation, we find, 1, that in order to give, in correspondence with the notion of substance, something permanent in perception (and demonstrate thereby the objective reality of this notion), we require a perception in space (of matter), and for this reason, that space alone has the determination of permanence, while time, for its part (with all, consequently, that is in inner sense), constantly fleets. In order, 2, to exhibit *change* as the perception correspondent to the notion of *causality*, we must take motion for example, or change in space. By it alone, indeed, is it possible for us to make changes perceivable; the possibility of these being incomprehensible by any pure understanding. Change is a conjunction of determinations contradictorily opposed to each other in the existence of one and the same thing. How, now, it is possible that, on a given condition, an opposed one should follow in one and the same thing, is not only impossible for any understanding to make conceivable to itself without an example, but without perception even to make intelligible to itself. That necessary perception here is one of the motion of a point in space, the existence of

which in different places (as a sequence of opposed determinations) only first of all makes changes actual perceptions to us. For, in order afterwards to make even inner changes thinkable, it is necessary for us to make comprehensible to ourselves, in a figurate manner by means of a line, time, and, through the drawing of this line (motion), inner change, consequently, also, by means of external perception, the successive existence of our own selves in different states. And the reason proper of this is, that all change presupposes in perception a something permanent, in order even to get perceived as change, whereas, in the inner sense, there is not any permanent perception to be found. Lastly, the category of community is, as regards its possibility, inconceivable to mere reason; and, consequently, the objective reality of this notion cannot possibly be cognised without perception, and that, too, an external perception in space. For how are we to think it possible that, several existent substances being given, from the existence of the one, there can reciprocally follow, to the existence of the rest, something (as effect), and that therefore because there is something in the former, there must also be in the others something, which last, from the existence of the others alone, cannot be understood? As much as this, namely, is required for community, but, among things each wholly isolated by its own subsistency, is utterly inconceivable. Hence Leibnitz, in attributing community to the substances in the world only as the bare understanding thinks them, stood in need of a divinity for mediation; for from their mere existence they rightly appeared to him unintelligible. We are quite able, however, to make the possibility of community (in substances as objects of sense)

easily intelligible to us, if we picture them in space and so in external perception. For space possesses in itself, already *a priori*, formal external relations as conditions of the possibility of real things (in action and reaction, and, consequently, community). We may easily show in the same way that the possibility of things as quantities, and therefore the objective reality of the relative category, can also be demonstrated only in external perception, and through it alone be afterwards applied to the internal sense. But, to avoid prolixity, I must leave exemplification here to the reflection of the reader.

This whole remark is of great importance, not only to confirm our refutation of idealism, but still more, when self-cognition, from simple inner consciousness, and the determination of our nature with no assistance from external empirical perceptions, are in question, in order to manifest to us the limits of the possibility of such a cognition.

The final result, therefore, of this whole section is: All the primary propositions of pure understanding are nothing more than principles *a priori* of the possibility of experience, and to experience alone do all *a priori* synthetic propositions refer; nay, on this reference rests wholly the possibility of these.

COMMENTARY.

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Introduction.

I.

There is no aim here but to suggest to the reader that a cognition, a perception, may consist of two elements, one *a priori*, and the other *a posteriori*. We are woke up to know or perceive anything, and we can be so woke up, only by sensible experience. Still this experience may be a compound; consisting, on one hand, of ingredients given by the senses, and, on the other, given by the mind itself. There is a relative use of the phrase *a priori*, as when we refer some particular to a general rule; but still the general rule itself may be only inductively acquired. Kant's *a priori*, we are to understand, then, is not the relative *a priori*, but an element in actual cognition that is still independent of every contribution whatever of special sense. It is important, also, to observe that room is left for a mixed *a priori*. *Change*, for example, is an idea which we could not possibly possess without experience; and yet the proposition of causality, connected with it, must be considered *a priori*. The judgment *change has cause*, therefore, is *a priori*, but not *purely a priori*. It cannot be said, however, that Kant remains always true to the distinction. The term *a priori* has—universally, we may say—with

Kant, the force of *purely a priori*, and seldom if ever that of *relatively a priori*. However it be with the idea of change, too, it is certain that the proposition of causality (though not possibly to be formed without reference to that idea) seems always to be spoken of by Kant as purely *a priori* (even on the very next page but one).

The study of Kant among us has as yet, for the most part, been conducted in the midst of so much difficulty, not only as concerns the thoughts, but even the language, that the result, gathered dimly and haltingly from the suggestion of merely rhapsodic phrases, has been, but too frequently, a simple caricature. Even now there is a mystical, ideal Kant in fashion very unlike his own plain, old-maiden self. Now, the position we see Kant assume, even in his very first words, ought to correct this. The subject is at once taken on the ordinary ground of experience. It is experience that, striking on the faculties, rouses them into action; and it is experience that is known. The whole position is but the position of Locke with a complement. Locke drew from the intellect as well as the senses, and Kant does no more; but, in what concerns the senses (to confine ourselves to that) the latter introduces a modification. Even in what we call experience, and hold to be due to the senses, may there not be, he asks, an element from within that adds itself to the element from without even in the very act of receiving this latter? What we are to see, then, is not a mystical, idealistic philosophy, but a mere physiological or psychological theory of perception, on the ordinary basis of common sense. That is, in view of his own presuppositions, we shall expect Kant to explain *how*, possessed of impressions which come successively into us, we convert these, merely

subjectively internal as they are (and only *by* action of our own internal faculties) into the objectively external world around us. From first to last, indeed, in Kant, it is experience that is referred to, and the common ground throughout is, as has been so often remarked by Kant's own countrymen, that of the ordinary Lockeian pyschology. At all events, the question Kant immediately opens before us is, How do *we* modify the subjective and internal *sensations* we *receive*, into the objective and external *perceptions* which *exist?*

The German technical terms we select for notice are these: *Erkenntniss*, *Erkenntnissvermögen*, *Erfahrung*, *Gegenstand*, *Vorstellung*, *Verstand*, *Eindrücke*, *a priori*, *a posteriori*, *Empirisch*, *Rein.*

The first of these terms may, certainly, be translated *knowledge;* but that word generally covers for us rather ideas than objects, rather what is intellectual than what is perceptive. Now it is the latter reference that, at least for the present inquiry, is with Kant the dominant one. An *Erkenntniss*, what we *erkennen*, is to be understood, generally, as what we objectively perceive. The *Erkenntnissvermögen* is, in the same way, for the most part, the perceptive faculty; but, perception for Kant always involving notions, the faculty, so far, is intellectual as well as sensuous, and the German term, without risk of misleading, may be translated generally cognitive faculty.

Erfahrung is the objective system of things we perceive and live; but it always involves the element of special sense. *Empirisch* has the same reference, as an adjective, which is possessed by *Erfahrung* as a substantive. *Rein*, again, is simply non-empirical; it is pure as without ingredient of sense. We have seen already how *a priori* and *a posteriori* similarly apply here. *Eindrücke* mean for the Germans pre-

cisely what impressions mean for us. *Gegenstand* is simply the object of a faculty, usually the perceptive one. *Verstand* may be used generally as in designation of all the intellectual faculties, or it may be used specially as distinguished, as well from judgment as from reason. The latter is the Kantian use proper. *Then* it is the faculty of notions, the simple apprehension of the logicians, as judgment is the faculty that under notions subsumes examples. Then, too, reason has a strictly Kantian sense, and peculiarly limited application, as the faculty of the *ideas* only, of which there are only three; and their function is to round and complete the work of understanding in perception, by adding regulative principles for the production of system. Reason and the Ideas, however, will not concern us in the present volume. *Vorstellung* is a peculiarly difficult word for us. It is exactly the Lockeian *idea;* but, unfortunately, we are precluded from the use of this word (idea), exactly meeting our want as it does, by the special meanings which Kant, to say nothing of Hegel, has given to it. In the immediate text, a *Vorstellung* is the result in consciousness of the action of objects on the senses. It is an intimation in consciousness, an impression on sense. It may at times be rightly enough translated by the most general term possible, consciousness itself, *awareness*, even feeling, and again by the most special, conception, perception, impression. I shall be found to avail myself of an ample latitude here in order to meet the requirements of the individual case.

II.

For understanding I have nothing to add here; and, in this volume, it is only understanding that is

my object, and not criticism. Nevertheless, I may remark that the fortune of all that follows depends upon the competence or incompetence of the criteria offered now. These, plainly, are taken directly from Hume's distinction between Matters of Fact and Relations of Ideas. The contingency alleged of the one, as the necessity alleged of the other, are evidently such as (for any future advance) to exact the strictest inquest and a definitive decision. This is a staple article of discussion between Mr Mill and the usual Kantian "introductions." But of that I am not qualified to speak. We have to point out here, however, that it is Kant himself gives us our very first check to the doctrine we have just read. He goes on immediately to tell us that said criteria of universality and necessity are to be had at a very cheap rate in all analytic propositions. Of what value, for example, is the apodictic validity of the proposition that all Islands are cut off from Continents?

But, leaving that for the present, I may remark that this section already contains by implication the entire programme. It is said, for instance, "Besides demonstrating the actual existence in our knowledge (perception) of principles *a priori* by a reference to fact, we might even *a priori* prove as much. We might demonstrate, that is, the indispensable necessity of such principles to the *very possibility of experience.* For how should there be any certainty in experience, were all the rules in it only empirical and (consequently) contingent? It were hardly possible, evidently, to allow any such rules the name of first principles." This is at once the very key-note of the whole business. What is empirical in perception (sensations, namely) is but subjective affection, a mere internal chaos of feeling that, without rule, can never

become that orderly context and necessary system of objective experience we call world. So far, however, we have but the *a posteriori*, the contributions, namely, of the lower cognitive faculty, or of the senses. But there is left us still the higher cognitive faculty, the intellect, the understanding: will not it also contribute, and will not its contributions be, from the very nature of the faculty, *principles?* These contributions, further, as independent of the senses, will be *a priori*. This is the scheme, then. The lower cognitive faculty will contribute *matter;* the higher, *form*. *Principles* will make objective experience of *facts*, the *a priori* of the *a posteriori*, *function* of *affection*. We here see the two sides: *contingency*, under various names, on the one; *necessity*, under various names, on the other. This, then, is what the *possibility of experience* means. Those principles, that *a priori*, those intellectual conditions, which shall throw the contingent, *a posteriori*, subjective, sense-feelings, *out*, into the necessity of a ruled and regulated objective universe, named experience. This was undoubtedly all that, in the first instance, Kant meant to himself by the possibility of experience. Whether or not a necessity to extend his formulary, and, with more or less of uncertainty, introduce into it even empirical references, no less to the confusion and perplexity of his own self than to those of his readers—whether or not this necessity seemed to him to arise, is what we have steadily to watch. In the meantime, let us take it for granted that the very hinge of all his relative reasoning is the thought, "Where would experience get its certainty," "how would there be a possibility of experience," if not from the *a priori* conditions of intellectual principles? It is with this thought in his mind that he goes on to suggest his further proceedings by the ex-

amples of *space* and *substance*. And here we may see that even the phrase "Erkenntniss *a priori*" is not necessarily only *logical;* it may refer to space, which though *a priori* to Kant, is still a *perception*—to him, as to us.

III.

This section, being quite simple and general, may be left to itself. Of technical terms there is an "*a priori*" towards the end, which, as valid through the identity of mere exposition, has only the force of a relative *a priori* as previously referred to. In the beginning there are *Erkenntnisse* spoken of, which, as without empirical objects, are not perceptions, but only conceptions. Conception, too, is plainly only the "Vorstellung" that is given to the "light dove." We have here also two other most important technical terms, though not in the present instance at all ambiguously or critically placed. The one is "Anschauung" and the other "Erscheinung," and with Kant, such is the use he can put them to, they both mean pretty much the same thing. An *Anschauung* is a perceived object. The "objective lessons" introduced by Pestalozzi, and such as we see now in infant-schools, have such terms applied to them by the Germans as "Anschauungslehre" and "Anschauungsübungen." The sense of sight is undoubtedly the sense specially signified in the word itself; but there may be an Anschauung without sight. A potato is quite as decided an object, an Anschauung, to a blind man as to me or you. Whatever special sensations are, from mere feelings, raised and concreted into what we regard as an object apart from us —these issue in an Anschauung. *Anschauung*, then,

is our *perception.* Object-recognition, the capability of the mind having what we call an object present to it, is evidently to Kant a special and peculiar faculty. To most British psychologists, the intellectual faculties are analyzed into Sensation, Memory, and Judgment. But those to whom this is enough have never once thought of the difficulty of how mere feelings in the mind, as light and sound, can possibly be concreted and thrown out into a single perceived object, say a Bell. Psychologists, to whom this difficulty has occurred, therefore, say the intellectual faculties are *Perception*, Memory, and Judgment; and, surely, with reason. This is not the place to discuss the subject of perception; it is enough here to say that Kant's word for the faculty in question was Anschauung. But we must add (as partly already noticed) that to Kant this faculty was, from first to last, much more a simple, special, and peculiar faculty than perception is or was to any British inquirer. Perception to Kant was, further, either pure or empirical. For the latter *Wahrnehmung* is the proper term; but, though Kant uses Anschauung as the general term for the faculty of the characteristic function, he at times varies Wahrnehmung by the expression "empirische Anschauung;" and he thereby indicates that Anschauung by itself means *pure perception.* Now there are to Kant only two *pure* perceptions, space and time; and generally it is to them alone the word points. Space and time, then, thus, are pure *objects* to Kant, just as a potato is an empirical one. This is very particularly to be borne in mind. I am not required to mention here other uses of the word Anschauung, as when we hear men's principles spoken of, their beliefs, convictions, Anschauungen! In that case the word means what

peculiar *views* men may have come to on this and that. Anschauung in that sense, indeed, is an idea, or, better, a theory (it may be an intuition), and it will consist of a number of Vorstellungen—as mere subordinate conceptions. But that is not the sense which we have specially to see in Kant.

Then, as regards *Erscheinung*, in English, perception is one thing, and *a* perception quite another; and so also empirical perception, and *an* empirical perception. Erscheinung, now, is *an* empirical perception. It has the force in it of the presentation of (or to) the subjective faculty. Erscheinungen, in fact, are to Kant simply presentations of or to *sense*. We have only, indeed, to see the origin of the term in the need for it which the peculiar theory entailed. Kant did not deny at last, and was under no necessity to seem to doubt at first, *Dinge an sich*, objects in themselves, independent external things which acted in such and such manner on us. But, neither doubting nor denying them, or, indeed, whether doubting or denying them, it was enough for him that we did not know them, or could not know them. As I have so often said, the scratch only knows itself; it knows nothing of the thorn. And that was the way in which Kant viewed the result of any action on us of possible things in themselves. We could not, by any possibility, know them, he thought, but only what they did to us. We had colours, sounds, feels, smells, tastes in ourselves, possibly, probably, or certainly, from outer things; but these outer things we did not know, and could not know. We could know only their effects upon us, these colours, sounds, etc. Object to us could not, then, be any Thing in itself, but only such object as we constructed to ourselves out of these colours, sounds, feels, etc. (His whole

theory, consequently, was how we accomplish this.) But such an object could only be an "Erscheinung," what *appeared* to us—say in consequence of the action of the presupposed unknown things in themselves. Kant's *Erscheinungen*, then, are simply our *objects;* but he thinks that he is under a necessity to call them so, because, when properly viewed, they are not, as vulgarly supposed, the things in themselves, but only the appearances to sense set up in us by these things in themselves; of which latter the existence is only an inference, a supposition, an hypothesis; and this inference, supposition, hypothesis, nowise helps us to *perceive* said existence. That existence, then, is not perceived, but only the appearances, the feelings, the affections, the states of our own—say the *scratches* which it causes in us. This point of view is fundamental with Kant, and it must never be lost sight of. We can see, then, now, that an Erscheinung, as an Anschauung, as a Wahrnehmung, is simply what we call an *object*, and that Kant himself would seek to add to this word nothing but the phrase *to sense*. Each of these, he would say, is *an object to sense*. It is the difficulty with these and other such words which has largely led to the Kantian caricatures which, hitherto, we have, in many cases, witnessed. It is often particularly amusing to behold the "noble Briton" stumbling along, "nothing daunted," amid those supererogatory blocks of "intuitings" and "envisagings," "inspections" and "aspections," "phænomena," "shows," "appearances," "manifestations," "ghosts"! The words, for all that, are often not easy suitably to translate, and I shall be found to avail myself here, too, of a considerable latitude of phrase.

IV.

That the judgment, "a body is extended," should be called *a priori*, necessary, universal, etc., is confusing, until the reader has, once for all, taken what we may call Kant's *groove*. I have already referred to this. The *a priori* here is the *relative a priori*, and has nothing to do with the *a priori* which constitutes Kant's theme. If we have, once for all, the notion body, we find involved in the very notion the quality of extension. It is quite evident, then, that, so far or relatively *a priori*, we can say a body is extended, and that the force of the averment, depending on a foregone conclusion, is, to that extent, universal and necessary. It is, however, confusing that these predicates, so essential as they are in the other sense to the entire inquiry, should be at all relatively or analytically applied. Then, again, the unreserved *a priori* attributed to the proposition, no change without a cause, is fitted to stumble the unpractised reader who remembers that Kant has just told him that the notion *change* is empirical. Kant, for all that, is still speaking quite correctly and consistently. To call any *synthetic* proposition *a priori*, etc., Kant has only to see the characters of necessity and universality in it, let the others be as empirical as they may. The synthetic propositions he calls *a priori* are not *a priori* in the sense of preceding all experience, or of being absolutely free from all elements and admixture of experience (which, indeed, they cannot be, as all begins with experience); but they are *a priori* in the sense that they contain a necessity, etc., which, *synthetic* as they are, sense or experience could not give them, and which, then, they must owe to the

subject—to the higher cognitive faculty itself. It is important, therefore, to see that the analytic judgments form no part of our inquiry at present, but only those which are synthetic. These, again, are either empirical or pure. Empirical synthetics are such as possess the predicate which they *add* to the notion, from a direct reference to experience. We know what a body is, say; but now, should it be asked, Are all bodies heavy? how can I know this without trying the fact in actual experience? That is not the case with the proposition, Every effect has a cause. That is a proposition *pure* in the sense that it is non-empirical, and it is non-empirical in the sense that, though the things united are only empirical (any actual effect, or any actual cause, is only known from experience), the nexus between them is not empirical; the senses only show a first and a second; the senses cannot see a relation of necessity. That, then, is the reason that the proposition of causality is called *a priori*. No smelling or tasting or listening or looking, no measuring or weighing, will arrive at the necessary nexus between the two affections: they can apply themselves only to these affections themselves. You see the hammer fall, you hear the sound follow; but that is all that the senses can tell you—a first and a second. Even were the facts so, the senses could not say, the first is, being first, cause, and the second is, being second, effect. But the very facts are not so; lightning is not the cause of thunder; precedence is not always the cause of sequence; nor is *post hoc* by any means necessarily *propter hoc*. It is by reason of the nexus, then, which is something quite beyond the senses, that the proposition of causality is named a true *a priori* synthetic. It may be called pure also so far

as this *nexus* is non-empirical; but it is not pure so far as what the nexus unites are things empirical.

We may perfectly well understand now, too, what Kant means when he says that "such synthetic principles constitute the entire end and aim of his whole inquiry." The proposition of causality precisely involves such *a priori* synthetic principle: he will be able to answer Hume's question, then, and much more, should he be able to demonstrate and explain *an* entire system, or *the* entire system of such principles. That is his one business, but in the prosecution of this business it comes out that it is precisely these principles (an *a priori* of the intellect) which make of our mere subjective sense-feelings this objective or *quasi*-objective universe.

V.

The important point in this section is the affirmation of it, as contained at once in its title. In fact, it places us at once before *the* question of metaphysic—the question of categories, and of categories *a priori*. For the reader that already knows Kant perceives at once that Kant is speaking with all his categories in his mind—specially those of substance, causality, and reciprocity. Nay, we may say that it is easy to see that Kant is speaking with *all* his principles in his mind; for pure perception (time and space) being added to the categories, we may hold the table of his principles proper to be thereby completed, the rest (the Ideas with practical principles and æsthetic principles) being, on the whole, pretty well corollaries. The importance of the term Anschauung comes here again, consequently, to be well illustrated. In fact, it is of the greatest importance to keep ever before

the mind this, that even with his categories Kant is unable to move from the spot unless by stepping on to the objectivity of perception. That is the necessary complement to his categories; and without it they are but pictures, immobile, inert, sterile. We saw that the source of what predicates we took up and added on in empirical synthesis was actual experience. Now, here, where the question is of pure, non-empirical, or *a priori* synthetics, we have to see that it is Anschauung plays for Kant the part of Erfahrung. This is very important. Indeed, it will become a question in the end (perhaps in another work) whether or not Kant has, for the getting of his pieces into action, been obliged to exceed even Anschauung, and so to double over on to experience as to reduce his entire industry to a palpable begging of the single question. But, be this as it may, this section, surely, leaves no possibility of doubt as to what Anschauung means, whether we translate it perception or intuition. To have recourse to imagination for the realization of a triangle is the same thing as to have recourse to Anschauung. Actual inspection of an object outwardly (by special sense) or inwardly (by general sense-imagination) is Anschauung. In his first preface Kant sets "discursive (logische) Deutlichkeit," or the "Deutlichkeit durch Begriffe," against "intuitive (æsthetische) Deutlichkeit," or the "Deutlichkeit durch Anschauungen, *d.i.*, Beispiele oder andere Erläuterungen *in concreto*." The word occurs so often in all of the German philosophers, and so often in the same unmistakable sense, that it is somewhat humiliating to find one's self expatiating on it. I vividly recollect, however, how, on the appearance of my first work, a reputed great German scholar questioned my translation of An-

schauung, and objected as what must wholly and hopelessly pose, "die Anschauung Gottes"!

VI.

The moment we get the point of view that the judgment of causality, every effect must have a cause (the *whence* of the undoubted necessary *connexion* in which was Hume's question), is an *a priori* synthetic proposition, we get to see also the general problem. If Hume asked, how is the *a priori* synthetic proposition of causality possible, it was easy for Kant to say, Nay, how are all *a priori* synthetic propositions possible? Of course, though Kant tells truly enough what the question came to, he does not accurately name Hume's thought. It never occurred to Hume "to make out that such a proposition is, *a priori*, impossible." The idea of an *a priori* force in its reference was precisely the very last that would have come to him even in a dream. From the footstep in the sand he was necessitated to think a human foot; and from the watch he found, a maker of it; but he would have rather stared if he had been told that the necessary connexion he was led to assume between footstep and foot and between watch and maker *lay a priori in his own mind!* Hume died in 1776, but had he been alive in 1781, I do not believe that Kant himself would have been able to convince him of that! "Had he but caught sight of our problem in its universality," of course, it is impossible to say what he might have done; but, viewing his fifty long pages on mathematical evidence under the "Ideas of Space and Time," it is very doubtful that what Kant said of mathematics would have at all changed him, and it is quite certain that he acquiesced, just as we

all do, in the necessary connexion of cause and effect, though he reflected that, from the state of the case, the belief could rest, naturally, only on an instinct, or, philosophically, only on a custom. The section, as a whole, is general, and very properly points out that *a priori* synthetics being, certain pure sciences will also be. The question, "How are these possible?" explains that other as concerns the "possibility of experience." As they "actually are," it actually is; and as they rest, it will rest—on *a priori* synthetics.

VII.

The system of pure reason figured here might very profitably be applied in explanation of the νοῦς, at any time that Aristotle talks of it as ἀρχὴ ἐπιστήμης. But this travels farther than Kant, and opens a very wide matter. We see here very clearly, too, what Kant's inquiry is to be: it is not to be a system, but only a gathering and a search of what will constitute the principles towards such. It is important to note, too, that it is not to "extend," but only "clear" and "guard" reason. The result, then, cannot be any dogmatic absolute philosophy, but merely an account of those *a priori* intellections that enable us to turn our own *a posteriori* feelings into objective perceptions, the objective perceptions of experience. That, then, is what the possibility of experience means. The word *transcendental* refers to it; or what underlies that word may be said to concern the *rationale* of the possibility of experience; though starting with the simple question of *a priori* synthetics, that is what the whole inquiry comes to be. *A priori* synthetics found or ground "the possibility of experience." What is transcendental forms part of the rationale

that explains how this actual experience of ours is possible. Experience requires synthesis, and what is transcendental supplies and explains all *a priori* elements of synthesis in general. It is on these that the possibility of experience depends. The whole matter, then, may be called a sort of dissecting of reason into its own primitive fibres—the fibres by which it catches up into objects all special sensations. So it is that it is a critique—a critical search, and a transcendental critical search, but not into "things" which are "inexhaustible," but only into the "understanding," which, already a restricted object, is further to be merely restrictedly questioned. We see that a *canon* is a code of rules or laws whereby to judge, while an *organon* would mean a collection of prescripts whereby to realize. What is *propædeutical* is, of course, a preliminary teaching of the way. What is *transcendent* is beyond experience; but what is *transcendental*, though beyond special sense, is not beyond experience, but is *in* experience, and is even precisely that element which, out of mere subjective special sensations like ours, renders this experience of ours possible. Still, Kant would have it used specially when it is *theory* or *rationale* that is in regard. Transcendental, in a certain way, is whatever can be known of sense, independently of sense. "It is occupied, not so much with objects, as with the manner of our knowledge of them, so far as that may be *a priori* possible." And that just means, *transcendental* concerns a rationale or *the* rationale of the possibility of experience through certain *a priori* general mental forms which, so to speak, *objectify* our *a posteriori* special sense-matters.

Transcendental Æsthetic.

§ 1.

Taking all, so far, on Kant's own terms, there is but little difficulty in understanding where we presently are. There are such things as *a priori* synthetics, and we have already seen a number of them, as substance and reciprocity, in addition to causality. Now, confined as we are, so far as what the senses tell us, only to our own subjective affections, only to certain states of special feeling within ourselves, light, sound, smell, etc., what is sought will be that *a priori* that rescues us from this *a posteriori*, that intellection that rescues us from this sensation, that objective subjectivity that rescues us from this subjective subjectivity—or, just in general, that objectivity, simply, which rescues us from our own affections, which actually throws up or out our own affections into the vast, seemingly external, seemingly independent world around us. The great question here, then, evidently comes at once to be, What are these principles, and whence do we derive them? As we have seen, they must be *a priori; i.e.*, they must lie in our minds, they must be products of our own mental faculties. But, again, there is not required any difficult or laborious analysis of these faculties. It is enough for us to take them quite generally. And our faculties, quite generally taken, consist of no more than the two sources of knowledge, Sense by which matter is given to us, and Understanding by which it is further worked up in the forms of intellection. As Kant himself has just intimated, then, we have to inquire, 1, Is there anything *a priori* connected with sense? and, 2, What are the *a priori*

principles of intellection? More, indeed: What are the *a priori* principles of intellection that are *perceptive* elements? Kant will be found afterwards to divide principles of intellection into those of the Understanding proper and those of Reason. These latter, however, which are the three Ideas, are only *regulative;* and, in this volume, it is our intention to confine ourselves to the important *constitutive* principles. What we have now directly to see, consequently, is, in search of an *a priori* element, the critique of Sense.

This section offers a valuable opportunity for the explanation of terms; and with that, and what has been already said, enough will have been done here in that direction.

We have already discussed perception, and can very well understand, not only from objects of sight, but also from the blind man and his potato (his shoe, his watch, his house, if you will) what Kant means by its reference to objects being direct or immediate (*unmittelbar*). The *conception* of copper is mediate, indirect, *mittelbar* (that is, the idea or notion of it), through a variety of individual go-betweens; but the *perception* of a penny is immediate and direct, and wholly without intervention (or mediation) of anything else. An object of perception is also *given;* that is, the matter of it, the sensation of it, is contributed to us by the special senses, sight, hearing, touch, etc. The general faculty which enables us to be capable of sensation is our sensibility. It is through sensibility alone that we possess perceptions; some of which, as due only to general (not special) sensibility, may be called *pure* (non-empirical) perceptions. Notions are the progeny of the understanding; but Kant indicates that they, and thought generally, are vacuous and idle unless filled and realized by actual

contributions of sense. *Sensation* will be understood at once; as also *empirical*, which is the adjective for (special) sensation. *Erscheinung* is more difficult; but the difficulty lies only in the term as a term, not in its meaning. It has been already explained, and is further furnished with a gloss in the text. It will be seen that I even at times translate it impression. The *matter* of sensation will also be plain. The "*form*," however, that throws the complex of impression ("*das Mannigfaltige der Erscheinung*") into "certain relations," will not be the worse of a word or two. An Erscheinung, an Empfindung, an Eindruck, that is, a colour, a sound, a feel, a taste, a smell, is not conceived by Kant as unity, or a unit, simple, and single, absolutely one. On the contrary, it is to him, and he calls it always, a "*Mannigfaltiges*," a complex, a multiplex, a manifold—that is, a complex, a multiplex, a manifold of units of sense-impression. Now, the *order* of these units, further, Kant conceives to be no affair of sense as sense. Sense only *receives;* it must be another faculty *dis-poses.* Now all this may be doubtful; but if we are to go on at all, we must simply take it at the hands of Kant on trust. A colour comes to us only in units of colour, and it is not the eye gives us these units as we think we see them *arranged.* So of the other senses. Possibly we may object that some special sensations are themselves only simple units, and that others, though supplying a complex, supply that complex in an order of units manifestly derived only from themselves, as the breadth of a smell from the sense that is named smell; but we had better suppress objection, so far, and simply take all as it is given us. It is certain that we can allow Kant as much as this at once, that, though the succession or collocation in which the

units of one or more senses may come to us must be due to that or these, still the interpretation which we at last give to said succession or said collocation is often no affair of sense, but of the intellect alone. We may, then, so limiting Kant's meaning, accompany him in his further discussion, without any constant or haunting sense of some hiatus on his part. In fact, it really comes to this, What *are* units to Kant? When he speaks of the units of a house, he means the material particles that are side by side in it. When he speaks of the units of heat, or light, or colour, he means the degrees in these. When he speaks of the units of substances, he means their qualities or accidents. And when he speaks of the units of causality or reciprocity, he means the objects (not the units of these objects) that may happen to be respectively so connected. A ship up and down a stream, water fluid and water solid, water and a glass, a bullet and a cushion, a stone and the sun, the moon and the earth: these objects, as we shall find, are all to his mind units in relation the one to the other, and the *Mannigfaltiges* he conceives in all these cases consists in the complex of connected objects. What, then, is a unit of complex differs to Kant with the differing relation: in certain relations it is a constituent *unit* of a single object, and in others it is a constituent *object* in a complex of such. Still it is to be understood that whether the elements of a complex be themselves units or at once objects, Kant conceives the *form* of their order (not but that succession is to Kant himself, indeed, quite an affair of sense itself) to be submitted, in a certain way, to the influence of *a priori* principles. Time, space, quantity, quality: these are *a priori* principles and act on units, if also on objects. Substance, causality, and

reciprocity, again, seem principally to act on ready-made objects. What is "pure in a transcendental sense" is whatever is non-empirical. It is important to see that Kant attributes such cognitions as substance, force, divisibility, etc., to understanding; such as impenetrability, hardness, colour, etc., to special sense; and such as extension and shape to general sense. These last, in fact, he attributes to that element of pure *a priori* perception he calls space. Transcendental Æsthetic and Transcendental Logic are now of themselves intelligible. When Kant speaks of isolating sense and performing a process, British readers expect to see an interesting induction begin, and are apt to feel disconcerted and rebuffed when abruptly informed that the operation has been already realized, and that they have to take time and space as the results. Similar other abrupt intimations in similar other circumstances are not rare in Kant. It is to be said, however, that in what follows on Space and Time we really have what amounts to an actual induction of these as pure or *a priori* forms of general sense. Call the process here, indeed, induction or deduction, it comes very much to the same thing.

§ 2. Metaphysical Exposition of the Notion of Space.

Space is the universal form of all we experience externally, and time is equally the universal form of all we experience internally. But, even as such, and just looked at, so to speak, with our usual eyes, there is something very peculiar and interesting about them. Even as we walk about, or sit by ourselves, it may occur to us as a point of curiosity, what can be the real nature or origin of such vast, indispensable, all-

embracing, but strange, singular, and extraordinary figures? Can they possibly be things? we ask ourselves. If not things (and they are not at all like what we call "other" things), can they only be qualities or relations of things? Or, finally, can they be neither things nor affections of things, but forms of our own which, though always only within our own selves, we yet attribute to things, as if real and, so to speak, themselves things. Leibnitz seems to have held the second position, viz., that, things so acting and reacting on each other, time and space were their results. The first position is that of vague common sense which has, as yet, not even questioned itself: space and time, however peculiar, it thinks, are still independent realities. Kant argues against both of these positions, and stands by that which is left. Time and space are to him subjective forms within ourselves, or from within ourselves. Now it is important, in the first place, that the exact force of this should be realized. Suppose a magic-lantern, suppose it to shrink together into its own slide, into the focus of its own slide—nay, suppose that focus to be a mere geometrical point—well, now, if alone in the world and opposed by nothing, any such magic-lantern could not possibly exhibit any of its figures, but let it have the power now to throw out of its own self a white sheet, or the spectral phase of a white sheet, then on to that white sheet it could project its figures, and yet all would be from within, and really still within, its own self. So it is that Kant figures space. It is within, but when we are touched within by any special sensation, space, on the instant, stands without holding it. Thus, then, we can conceive space as an expansible disc potentially packed within us, but starting out, even infinitely around us, on

any call of actual sensation: it is, as it were, a mere spectrum, a mere mirage of the eye. Now, if we can conceive that of space, we may similarly conceive it of time; and that is the position of Kant. Under the Arabian seal, the genius was within, invisible; but the seal being broken, it was a smoke without that filled the universe. We have now to see Kant's arguments.

These, naturally, must be conditioned in the first place by Kant's *presuppositions*. Now, one of these was that whatever we *materially* knew could only be an affection of our own, and, consequently, within our own mind. But though every sensation was our own and within us, it did not follow that it was an act of our own, or at all depended upon *us*. We were, indeed, in certain cases active; but we were also in other cases passive. We could solve problems and consider a great variety of things actually in our own head; but we could not, of our own will, bring into our head either any one colour, or any one sound, or any one touch, or any one taste, or any one smell. In all these references we were quite passive, and had to wait. Or, in Kant's own phrase, all these were intimations *given*. In his first edition, it seemed to be indifferent to him whether they were given from within or from without. Locke might be in the right, but so also might Berkeley. This he altered in his second edition; and persistently declared thenceforward, that there were actual outer objects, things themselves, or things in themselves, which things acted on us, and so set up in us the affections of our own which we called sensations, but which we threw out and built up into perceptions. These perceptions, then, were but constructions of our own affections, and had nothing to do with

things themselves. Things themselves were unknown to us, for we could only know, not them, but the effects they caused in us. All this, of course, does not sound very unreasonable on the large scale; for it is easy to see that all we materially know is, at bottom, subjective sensation, as colour, sound, etc. Nevertheless, if the reader will but try it by reference to any actual object, he will find it hopeless. Let him take out his watch, break it up into its various pieces, and put it together again. He will find, of course, that what he has put together into wheel and lever, main-spring and fusee, pinion and axle, inner case and outer case, dial-plate and hands, gold and glass, etc., etc., were, in the first instance, as regards each and all of them, simply colours and feels. Still he will not find it easy to conceive that all was owing to perfectly unknown things in themselves which set up these feelings in us, and so merely gave us opportunity to construct a watch out of them. I do not think it will help him either to be told, by Berkeley, that there are not any such things in themselves, but only a Being in Himself, only God, and that it is He, from moment to moment, gives us this colour and that, this feeling and that, and so makes it possible for us in the end to construct a watch. It is, surely, a curious idea, to conceive God holding up the glass to me, and handing me the razor that enables me to shave! Of course, there are two ways of conceiving the things in themselves: either simply as something, singular or plural, in the unknown, inconceivable absolute, which, as potentially alien to us, acts on us we know not how; or, taking up a bit of the gold, or glass, or steel of the watch, we may say the thing in itself to be conceived here is not that absolutely unknown thing in itself, but only that relatively unknown thing

in itself which, as a substance, is so and so to us, but to subjects differently endowed might be quite otherwise. I take leave to say that people, if they like, may feign that what to me is a bit of wire may to an inhabitant of the moon be a leech, but, for all that, what is conceived as the relatively unknown thing in itself is precisely the one, single, absolutely known thing. I decline to believe any pin a mere cry from the awful sanctuary of the thing in itself.

But be all that as it may, there is no doubt that Kant, and it is Kant concerns us here, did conceive the thing in itself absolutely unknown, and what we call an object only a *quasi*-object put together out of our own subjective states. The question with him now, then, naturally would be, How does this take place? How can a mere series of feelings in the single point of consciousness within us become an object without us, and the whole universe of objects without us? It would strike him at once that if they are all, firstly, within us, they are all, secondly, in time and space, and that in these must largely lie an essential part of the problem. It would also occur to him that, if these are to act on what is within, they must themselves be within. The next thing, then, would be to prove that, and make it credible to himself. And here he would separate the two things; here he would say that, in reference to sense, these two things indicated a double side. There were in sense feelings that always remained internal, joy, grief, pain, etc.; but there were also feelings, as colours, sounds, touches, etc., that came immediately somehow to be regarded as external. Now, if time could be truly predicated of all feelings, space could only be predicated of those to which externality was attributed. Space, then, might be called a form of external

sense, and time, similarly, a form of internal sense. All that we call external presents itself in relations of space, and all that we call internal we perceive in relations of time. That is, there is an external sense, and there is an internal sense. By the former we perceive what we call things, and by the latter we perceive, not our own soul (that as an object we never perceive), but the feelings of it, the states of it. Things, then, are perceived in space; and our own internal condition, our own states, in time. Now, then, we may repeat our questions in regard to space and time; and, having done so, we shall be prepared for reception of the arguments of Kant. And here we are told at once that the exposition constituted by these arguments will be a *metaphysical* one, or that it will prove the notions on which it is employed to be *a priori*.

The first argument for the peculiar nature of space is that it is not of "empirical" origin. Empirical, as we have seen, applies to whatever is a product of *special* sense. Now, conceiving that special sense has no objects but colours, sounds, etc., it does appear as if space were no product of special sense, but rather—all objects of special sense being perceived not only as different the one from the other, but also as in different places the one from the other—as though this circumstance of place (*i.e.*, space) were simply involved in the perception of objects, and came along with these. It does seem that the external relations of objects imply space as already existent, rather than that space is a consequence of these relations. Space, in fact, shows rather as a condition of the very possibility of experience than as a fact derived from experience.

The second argument is to make good the necessity and universality of space, and, consequently, the inference that it is *a priori*.

The third argument will prove space, though *a priori*, to be still a perception, and not a notion. It has both the unity and the parts, namely, of a perceptive, and not those of a logical, object. I have given a decidedly logical import to "Bestandtheile," as authorized by the corresponding passage under the exposition of Time (and as fully explained elsewhere). That space, too, should be the basis of geometry corroborates its *a priori* nature.

The fourth argument is, like the third, in support of the perceptive, not merely notional nature, of space; the infinitude of which, in relation to its parts, is still perceptive, and not, like that of a notion, merely logical.

§ 3. Transcendental Exposition as Regards Space.

The first word here relating to *transcendental* intimates that that term means, not only what is *a priori*, but what, as *a priori*, is the foundation of other *a priori* synthetics—manifestly in experience, like causality, etc. Kant's transcendental machinery, then, constitutes what he proposes in relative answer to Hume. But the immediate reference here is to space as bearing on geometry; and, in that reference, the former is the transcendental principle of the latter. The reasoning, nevertheless, and intelligibly so, is not from the former to the latter, but from the latter to the former. Geometry *is* derivative from space; and again, geometry is only explicable on the presupposition that space is so and so. These are so far reasons, as well for the perceptive as the *a priori* nature of space. I may remark that we have here the terms *Anschauung*, *Wahrnemung*, etc., so used that the senses we have already given them are rendered

quite unmistakable. It is specially illustrative of the word *Vorstellung*, too, that an *Anschauung* should be called an *unmittelbare Vorstellung*.

Inferences from these Ideas.

There are a good many essential Kantian distinctions here, which it is important for us clearly to recognise and securely take along with us. There are expressions in Kant about a *one all-embracing* space and a *one all-embracing* time, or that seem to bear on a making good of relations in *all* time or in *all* space, which may mislead certain students, who, as is their way with their Aristotle and their Plato, have eyes and ears only for *passages* in their Kant or their Hegel—expressions, then, in such references, which may mislead such students to attribute to Kant something very like an absolute space, and an absolute time, and a one only possible absolute experience. Now due consideration of the section before us is, surely, alone adequate to break up and disperse all such fogs and mists of mere dream, apt as they may be to settle down on the very clearest heights or the most undeniable hollows. We are reminded, for example, that, possessing sense itself before any action on sense, we may possess also, in our own subjective structure, pre-existent *forms*, pre-existent *conditions*, attached to the susceptibility itself, which, on reception of impressions, may be called out and come forward to add themselves on to, and mix and mingle with, these. Now of this nature is space. It is but a colour or a twist which we ourselves give to things. "Absolute reality," as it is (II., 44) expressly denied time, is in truth denied space. Space, in fact, is "nothing," the moment we abstract from our own peculiar sub-

jective structure. Without this abstraction, but with express reference to the peculiar structure of our own senses, it may, indeed, be named a pure perception; but even as such it is a void subjective form. Nor, in this form, is it things we see, but only appearances to sense. Such things—things in themselves—are not at all known to us—such things neither are nor can be known to us—such things, indeed, are never asked after by us. How, then, in the midst of such mere subjective fictions of various kinds, any one can dream of an absolute experience is something very strange. Why, the idea of an absolute experience never once struck Kant. We know that, besides his "*intuitus derivativus*," he postulated an "*intuitus originarius;*" and we see here his very "*intuitus derivativus*" split up into an actual infinitude of possible experiences. Of the perception described here, it is only from the point of view of "a human being" that we can talk of it: "as regards the perceptions of other thinking beings we cannot at all judge." Even if we examine Kant's expressions themselves in regard to a "one" time and "all" time, they will not be found to bear out those seeming absolute wonders of an all-embracing space and an all-embracing time, of which we have heard so much. He says (II., 128), for example, a certain schema concerns "the relation of the sensuous perceptions, the one to the other, in all time;" and, again (153), he talks of this same relation as that of "the one to the other in one time." These expressions, then, are equivalent the one to the other. Whatever is meant by "one time," that same thing is meant by "all time." Now to this latter expression there is a parenthetic clause added which explains what Kant means by it: "The relation of the sensuous perceptions, the one to the other, in all time

(that is, *according to a rule of time-determination*)." Now this "rule of time-determination" means nothing but the moment of objectivity in the action of a category of relation on any connected objects whatever. "All our judgments," says Kant (III., 58), "are at first mere judgments of sensuous perception; so far, they concern only us, *i.e.*, our own subject; it is only afterwards that we give them a new nexus, to an object namely, and then there will be validity always for us, and in the same way for everybody." And this means that the judgment, at first subjective, in regard to the stone and the sun, or the mutual relations of the moon and the earth, is, in the second instance, *objective*. There is a nexus, now, of causality in the one case and of reciprocity in the other. That is all that the prodigious phrases "one time," "all time" mean: merely that, in any one case whatever, the *subjective sensations* have become converted, through the category, into *objective perceptions*. That is the whole matter; and we call in all Kant's cases to illustrate it: the house, ice, ship, stone and sun, bullet and cushion, glass and water, earth and moon. When Kant *objectified* his house, his ship, his warm stone, his dinted cushion, I wonder if he had the idea that he was carefully laying all these things up in a one all-embracing space and a one all-embracing time—for his own subsequent commodity when he pleased to want them! Both the "one" time and the "all" time, then, mean merely a "rule of time-determination," and this rule results from the action of a category that, quantitatively, qualitatively, or relatively, connects objectively in time what were previously only unruled subjective sensations. The idea of an all or a whole of a one all-embracing time" never once occurred to Kant in this reference. Any approach to such phrase in Kant,

indeed, means only the same thing—precisely the same thing—which he means by the indefinite phrase, a ruled and regulated context of experience. And that means that there are to be necessity and objectivity in our knowledge, and not subjectivity and contingency merely. The "rule of time-determination," in fact, only determines something as *after* another, or *before* another, or *at the same time* with another, according to the category that acts, causality, reciprocity, etc.; it only determines the time-relation of one thing to another, there being no consideration whatever, with reference to time and space, but of the two things themselves. The Brobdingnagian idea of connecting each individual thing into the collective contents of the whole huge universe would have made Kant stare.

We are told, then, that space gives no intimations to us of things in themselves or of the native relations of things in themselves. It is only a peculiar spectrum vouchsafed to us peculiarly, in order that our subjective affections may become for us certain external appearances to sense. The conditions of our sense belong to us, and not to things; and so it is that qualities dependent on these conditions may be known *a priori* or in priority to the things themselves. All, too, is only *ex analogia hominis;* or all is only *sub specie hominis*, and not *sub specie æternitatis.* But if space is only subjective, we must not confound it with other things which are also commonly called subjective. From the ordinary empirical position a rose is conceived as a thing in itself, but still its colour is acknowledged to be subjective, or an affection in us. So it is with what are called secondary qualities in general. These, however, are sensations, and we are limited to each as we feel it. Space,

though subjective in place, is not a sensation, but a perception, and as such objective in function to the development of a number of *a priori* synthetics. The rose is conceived as a sort of thing in itself when compared with its own colour; but in the case of space there is only itself; and apart from itself there is nothing in itself to which to refer it. It is only the potential, spectral, subjective projection we describe.

§ 4. Metaphysical Exposition of the Nature of Time.

The first argument here is, as in the case of Space, that Time is no contribution of special sense, but is simply implied in the successions and co-existences of the actual objects of sense. Like space, also, it is universal and necessary. For that reason, too, it similarly gives rise to apodictic derivatives. Neither is time, any more than space, a notion: it is a perception, and for precisely the same reasons (perhaps more simply put). The infinitude of time, likewise, is associated with similar considerations, which constitute, indeed, a welcome gloss to those on space.

§ 5. Transcendental Exposition of the Notion of Time.

There is no comment required here.

§ 6. Inferences from these Ideas.

Comment here, too, is pretty well superfluous. It is suggestive that time and space, unlike sensations, are not referred to objects other than themselves. It is for that reason that Kant, by-and-by, calls them

"Unthings." They are to him only two formative properties of our own soul. The subreptions of sense have no analogy to the ideality of time, either. They are sensations, and referred to an object; but time is a perception, and referred to no object.

§ 7. Further Explanations.

What is said here, too, is very clear. The calling of time and space two eternal, infinite, and self-subsistent nonentities (unthings), etc., will be observed. It is worth while pointing out here, too, that while *we* mean only consciousness by the term inner sense, Kant means by it emphatically a *sense*. An inner *sense* is an absolute necessity to him in order that he may account for time as only a form of it. On any other supposition time would become simply a quality of our inner nature, and unaccountable so. Of course, there is some room for objecting to such doubling of ourselves as gives us two modes of looking at our own interiors. We shall find the distinction involved here further discussed under II. of the section that follows.

§ 8. General Remarks.

On the whole, these remarks also, as exoteric and easy, may be left without comment. No. II. perhaps requires a little attention, Kant's distinction between *apperception* and *inner sense* being, at first sight, somewhat difficult. It means only this: Apperception merely logically knows a bare thought, "I," or "It is I that am thinking;" while inner sense perceptively knows one's own inner sense-states. But these being *sense*-states, all within is as phenomenal as without,

for the "I" is but logical, and wholly without matter of objectivity. That is, our own subject is known only as it appears to us under the modifications of our own inner sense, and, consequently under the condition of time. M. Cousin is eminently mistaken in what he understands here—see 4me Leçon, *Esthetique Transcendentale*, p. 82.

Returning to No. I., we may just say that it proceeds thus. We know not things in themselves, but only the manner in which they appear to us. And in that manner there are two distinctions, one formal, and one material. Time and space constitute what is formal, and special sensation what is material. Both are emphatically subjective; but time and space, as perceptive, are objective in function. These, too, are *a priori* and pure; while what is material is *a posteriori* and empirical. Evidently it is through possession of the formal elements that we are able to foretell circumstances which no material element, as it arrives, will fail to exemplify.

Kant is very stout upon this, that, were time and space real, the very existence of two such unthings (monsters) would be enough to convert the whole of experience into illusion—it is their ideality shall insure reality! This is not Carlyle's interpretation in the *Sartor*. So it is that time and space cannot be attributed as forms to the perception of God. His perception ("*intuitus*") must be "*originarius:*" ours is but "*derivativus*," and an "*intuitus derivativus*" may appear in many modes.

The general conclusion in regard to the question, How are *a priori* synthetics possible? is this: In certain cases, when we would advance beyond a notion, not by analysis, but by synthesis, we may accomplish this by having recourse to the pure per-

ceptions time and space, but always only in reference to objects of possible experience.

If we look back now on what has been done, we shall have no difficulty in seeing that Kant, first, came to assume the proposition of causality to be an *a priori* synthetic. What must have further suggested itself then to the thought of Kant, is also pretty plain. When we want to increase our knowledge, we turn to experience. The notion of something or other is presented to us, say a Voltaic pile. Well, at first our knowledge of it is little or nothing. We want to increase our knowledge, consequently, and what do we do? We subject what is in question to *experiments*—to trials, that is, in actual experience; and each trial tells us something, adds new fact after new fact to the sum of our knowledge. I pick up a plant, and I try it in experience by many ways—counting its stamens, pistils, inquiring into its tissue, etc., and at last I know a hundred things about it which I did not know before. Or I pick up a stone, and try it with knife, hammer, acid, etc. In this way it is quite easy to see the possibility of *a posteriori* new judgments or of *empirical* synthetics; but how are we to conceive the possibility of adding *a priori* to some notion? Anything *a priori* is alone there before us: we may analyze it, of course, but how can we possibly seek to add to it from an elsewhere, when any elsewhere exists not? That is the meaning of how are *a priori* synthetics possible? The example of experience is at least calculated to suggest a medium of reference, and we ask—or, presumably, Kant asked—is it possible there can be any medium which will extend to us expedients of *a priori* synthesis? Here, possibly, the pure mathematics may present themselves, and we may ask further how are their pro-

positions, which are in great part pure and at the same time synthetic—how are they possible? Were such question asked, it were hardly possible but that space should suggest itself, and, if space, by necessary consequence, time. But what "a going up of a light" such suggestion would be to Kant, who firmly believed *things* to be only his own sensations, his own affections, his own states! The whole possibility of an external objectivity that was all the while only internal and subjective, would at once dart upon him. Empirical experience (if the collocation be pardoned for the nonce), he would immediately say further to himself, is, so to speak, not the only experience; there is actually a pure experience, an *a priori* experience. All the components of experience are not by any means restricted to the *a posteriori*. There is pure sense, as well as empirical sense; general sense, as well as special sense. Should we want *a priori* synthetics, we may take them up by the handful, if we but turn to pure experience, to pure sense. Now then, it would be, that Kant would think again of the proposition of causality, and try if he could answer Hume's question in that regard by a reference to this new element he had come upon of pure perception. But, plainly, if this did happen to him, he must, so far, have failed. No reference to time or space as medium will find in it the *idea of necessary connexion*, the origin of which was all that, relatively, tasked the curiosity of Hume. But, rebuffed from pure sense, it is only natural to suppose that pure intellect would be the next idea, and the consequent question instantaneously follow, Is it possible that pure intellect, quite as well as pure sense, may be an actual source of *a priori* synthetics? In that case the proposition of causality may be one of them? So situated,

they will plainly constitute a system, too; and a single general *rationale* will account for the whole of them.

This that concerns intellect is, as the reader himself will readily surmise now, what we are going to see in the Transcendental Logic. But, as regards the Transcendental Æsthetic, it is easy to understand that Kant, while he still confined himself to its interests proper, would find himself impelled in the first place to seek for proofs in regard to this surprising suggestion of the *a priori* nature of space and time. Now there were just two necessities in any question of a proof. If space and time were to constitute a medium of pure experience for the supply of *a priori* synthetics, they must be proved, first, *a priori*, and, second, perceptive. In point of fact, Kant seems to have four arguments here; but the truth is that there are only two hinges of argumentation, though each is, in a certain way, double. Space and time are proved *a priori* as being, 1, Not special sensations themselves, but presupposed by all such, and, 2, In their own nature universal and necessary. That they are perceptive, again, is proved by reference, 1, To their nature as wholes and parts, and, 2, To that same nature even as considered infinite (*i.e.*, as wholes, as parts, as infinitudes, all is æsthetic and perceptive, not logical and notional). There is, of course, a sort of argument by mathematical corollary in support, but it hardly requires separate mention. That, then, is plain. Kant is under a necessity to prove time and space *a priori* and perceptive, and nothing more. They are to Kant, then, simply the same forms which they are to us—with only this difference, that to him they are *a priori* and within, to us *a posteriori* and without. Those extraordinary

monsters attributed to a one all-embracing space and a one all-embracing time are but the Ossianic delusions of failure to follow the thought, or, it may be, only the German.

Transcendental Logic.

The immediately preceding comment referred to § 8, and I shall remark here only on what general introductory matter (with regard to logic) precedes § 9. Said matter is eminently Kantian; but, as quite current, it stands in no need of interpretation. How perceptions rest on affection, and notions on function, as well as what these words mean, will be understood without difficulty. One great point is to observe how Kant looks on *general* logic, and how he pre-figures a *transcendental* logic. General logic, as applying to mere forms available for objects generally, and independent of what objects may be specially, is for Kant wholly non-empirical; and, consequently, wholly pure or *a priori*. A *transcendental* logic, then, will contain what principles in preparation for experience are produced by the action of the pure logical elements on the pure perceptive elements. And, naturally, this suggests two divisions: one for the discovery and tabulation of the required logical elements; and another for the rationale and explanation of how these pure logical elements, towards experience, combine with the pure perceptive elements. The first division Kant calls his *Analytic*, and the second his *Schematism*. Further than these we do not go in this volume, but leave what concerns the *Ideas* and the consequent *Dialectic* untouched.

We are to understand, then, that the meaning of

an inquiry called *transcendental* is this. We ask in it, Is it possible to attain to perceptions before perception, to a knowledge of objects before presentation of objects,—so to speak, to experience before experience? Such results, in the event of any, we should call *transcendental.* For anything to be transcendental, it is not enough that it should be simply *a priori.* The propositions in mathematics are *a priori*, but we do not call them transcendental. We do not call space itself transcendental merely because it is *a priori*, but for this, That it is a condition, source, ground of an actually perceptive knowledge of objects in independence of objects themselves—that is, in antecedence and anticipation of objects. Now, if there are such transcendental perceptive elements as time and space, may there not be also transcendental discursive elements—logical elements as well as æsthetic elements—a transcendental logic as well as a transcendental æsthetic? Any such elements can only be *notions*, and it is difficult to see how notions are to be applied in experience, not only *a priori* perceptively, but *perceptively* at all. Still we may pre-admit or suppose some such action in perception even on the part of notions. If such notions are, what are they, or how find them? And here Kant suggests that notions are only predicates of possible judgments, and that judgment is, of understanding, precisely the characteristic act. The conclusion is not far to seek, then, that, if we can enumerate for understanding all its own proper functions of judgment, we shall have arrived also at what elements in that connexion are to be called transcendental. But where are we to get an enumeration of the functions of judgment, if not in logic, and in logic, too, that is already, complete, pure, and perfectly

a priori? In this way we are guided to a clew to the principles which are specially in request. Such clew lies in the analysis of the understanding as a systematic unity of certain constitutive functions; and such clew, also, being under guidance of a principle, cannot fail completely to succeed.

This I think contains all that is said by Kant here as in special bearing on his single object. Of course, we have a great many more things said; but, as perfectly general, they are at once intelligible in themselves. All these clearly-distinguished various logics, all these canons, organons, and catharticons —as precisely the outside examination-element that is in request there—we shall leave for the professional classroom.

We shall merely, in conclusion here, insist on the reader bearing in mind what sort of faculty understanding is as opposed to perception proper: that is, that it is non-sensuous; non-perceptive therefore; and, consequently, only discursive, or cognisant through notions. While perception rests on affection, we must see understanding to rest on function; and function is that act whereby several elements (possibly perceptive) are reduced into unity under another element (possibly logical) that is common to them all. *Spontaneity* (intellectual action) and *receptivity* (of sense) may be both at once necessary, then, for any and every act of perfected perception—the perception of experience. Now, if we would complete our list of the *a priori* factors in the perception of experience—our list, consequently, of the possible sources of *a priori* synthetics—we have only to add to the exhaustively complete elements of pure sense (time and space) which we have succeeded to discover, an equally exhaustively complete enumeration of what

a priori functions of the understanding, of what *a priori* notions, are necessary to reduce the units in every varied complex of sense-impression (but received once for all into time and space) into the eclipsing unity—almost, as it were, into the formative kaleidoscopic unity—of a single, organic, true perceptive act. Such latter list, it is easy to see, we shall complete by exhaustively analyzing the function of understanding. But the function whereby to understand is identical with the function whereby to judge. It at once strikes us, then, that it may not be so difficult to discover, in the first place, all the native functions of judgment, and then, in the second place, most probably through them, the complete system of the various *a priori* notions that are necessary for the reduction into perceptions of the various sense-manifolds of impression.

§ 9. Of the Logical Function of the Understanding in Judging.

It is natural now, then, after what precedes, that Kant should proceed here actually to analyze the function of understanding or judgment. He does not inform us, however, of his various steps in the general heuristic process, and we are rather disconcerted and thrown out by the suddenness and abruptness of—without more ado—a matured and completed reference to ordinary school-logic. Still, we have to consider all that has been already said of logic. We have to see that it (universal logic) amounts to an *idea* of pure understanding, or that it is the *a priori* system of the pure, completely general *forms* of intellection; and, so seeing, we shall be at once ready to conclude with Kant that it is there (in logic) we shall find the required systematic analysis

of the functions of judgment which will directly lead us to our ultimate object in this place—a complete list of all *a priori* notions. Kant, in taking up for his purpose the various classes of judgments as they appear in the "usual *technic* of the logicians," will be found to have very considerably — but very ingeniously and attractively—*dressed* them, *towards* that purpose. It will be the reader's duty, therefore, to give himself the advantage of a reflective pause here. This *dressing* of Kant represents on his part a whole drama of meditation. It is deep, true, full. It throws much light on the process of thought as thought, and is really very valuable. That the moments of modality may be regarded as applicable to the function of thinking, successively in the form of understanding, judging, and reasoning, is not only engaging, but happy and suggestive: they really seem to represent three degrees of incorporation, so to speak, into the mind. But all here is so plainly put as to suffice for itself, without a word of exposition.

§ 10. Of the Pure Notions of the Understanding (the Categories).

There is a good deal here—in what relates to synthesis, perhaps, rather than to the categories themselves—which may excusably appear difficult and prove not inconsiderably embarrassing to the reader. The first point, then, is this. Time and space are conceived by Kant as already *sense*-materials (not *special* sense-materials, but *general* sense-materials) *towards* the formation of two *a priori* perceptive objects. Of course, in regard to such objects, there can be no question of what is properly called *matter* (the contributions of special sense), and the word materials must be understood to imply here only materials of

form. Time and space, if *a priori* perceptive objects, will still (as devoid of all elements of *special* sense) be mere forms—forms, namely, of *general* sense. Still these forms are not blank; they have each such and such a nature; they have each such and such contents; they are composed each of such and such elements, and these elements may be regarded as their constitutive materials. To Kant, in short, each, whether time or space, is a unity, but the unity, so to speak, of a multiple, a manifold: in his own words, indeed, each is an "*Einheit*," but each also is a "*Mannigfaltiges*." We have simply to conceive time and space, that is, as certain peculiar *a priori* webs or tissues; each, as a web or tissue, one, but each also, as the same web or tissue, composite—a complex, a concrete of certain specific constituent elements (the two and the three dimensions respectively)—it being at the same time understood, nevertheless, that, in all other respects, each is precisely what and as *we* know it in everyday experience.

Well, we are to conceive time and space as at first only general sense-materials *towards* objects. But being *a priori*, they are necessarily mental, and necessarily held of the intellect. Then, again, being held of the intellect, it is impossible but that this intellect should have taken possession of them. In what faculty or function of the intellect they are held, that is the imagination. Now the imagination must be conceived possessed of a power of movement even *a priori*. It is an active faculty, and if *reproductive* in regard to empirical matter, it may surely be allowed to be *productive* (active, motive) in regard to *a priori* or formal matter. But taken up by imagination,—currently and recurrently, from end to end, possessed by imagination,—what is this but synthesis? The

general sense-forms laid into imagination, then, must be conceived to undergo a first process of synthesis thus; and necessary action on the part of memory as well, is not to be objected, for memory is itself imagination, or a form or phase of it. Imagination, in short, gives *synthetic continuity* to any complex of units committed to it.

It is fully too soon to say so; but it will help intelligence, to understand at once that there is really postulated by Kant (as he expressly declares himself here, indeed) what amounts to a second synthesis—the result of the action of the categories (under pure apperception or self-consciousness) on said first synthesis. It is imagination, that is, which holds up time and space to the categories as the various functions of unity appertinent to the unity of apperception. Imagination gives continuity to the units; the categories give them unity—into apperception. It is only so at last that time and space themselves may be conceived to have become *a priori* objects actually *formed.*

Now what is the most important point of view by far that we can gain here is this. That reduction of time and space, under the unity of apperception, through functions of apperception, *is the whole of Kant's work.* That is the transcendental new province he claims to have conquered for us: that is his answer to Hume. General logic is without matter; but transcendental logic has the matter of the transcendental Æsthetic. This Kant tells us again and again; and we see in it what was his specific idea: The functions of apperception acting on time and space shall generate an *a priori* schematism, into which received, these our own subjective affections (sensations), shall appear to stand out around us as

objective things in an objective universe. I think this, with the note under the text, will suffice to make plain whatever concerns synthesis here. That the categories, too, may be described as grounds of synthetic unity *a priori* will now not be hard to understand: each category is a principle of *a priori* synthesis for the manifolds of *a priori* sense—into the unity of self-consciousness.

As regards the categories themselves, many readers, it is to be feared, will be disconcerted by a certain feeling of suddenness and abruptness in their case too. They have too much the look of being merely set down, and we think to ourselves we should like to have seen them issue from some recognised process of actual derivation. If, however, we but admit, and put ourselves at home with, the preceding table of the moments of judgment, we shall find that we may grant said difficulty to have pretty well disappeared.

Synthesis, from the very nature of the case, precedes analysis; and it is not hard to conceive that the same functions that give unities of judgment in analysis may very well act similarly in synthesis. But the moments of judgment, regarded as synthetic, are at once *a priori* notions of synthesis, are at once the categories. That is all that, by way of derivation, we are to understand for the categories; and, if we will but co-operatively think with Kant, perhaps that is all that, in such respect, we need understand for them. What follows under the name of "deduction" is not a derivation, but a justifying illustration of the categories as compared with the actual wants and facts of experience. It is an illustrative confirmation of them by arguing their actual use. In regard to both points, indeed, it is right to warn the

reader of a probable feeling of difficulty on his part. Not only may the categories appear to him insufficiently derived; but their deduction may appear much less a deduction than a miscellany of remark. These remarks, however, are arguments for the categories from their more or less possible, their more or less probable, or their more or less indispensably necessary, use.

Of course, we have to grant that the previous table of judgments is exhaustively complete, if we are to assume as much for the present table of categories. In regard to both tables, as said already, also, we have to co-operate with the author, if we are not to hold of both, that they are simply dogmatically assigned. The rest of the section is easy.

§ 11.

We are to understand, then, that synthesis is the result of the understanding (through movement of imagination and under unity of self-consciousness), inspecting, selecting, and connecting the various units in the complex, composite, or manifold of perception; which manifold, further, may either be empirical (as due to special sense) or pure (as due only to general sense). This eleventh section, we may say, is, in many respects, not only as regards Kant, but as regards successors of his, a very important one. So free is it in expression, however, that no remark seems called for. We see in it how Kant's own sense of having discovered the very system of all the moments of mind and under unity of a single principle, grows more and more, at every successive step, into bulk and certainty with him. One has seen, also, so many strangely unintelligent

mistakes as to the relative importance of the two main divisions of categories, that a word in that direction may prove not superfluous. I may say at once, then, that there are no grounds whatever for holding the dynamical categories to be more real, more existential, or simply, in any way, more important—so far, that is, as the general scheme goes—than the others which are named mathematical. It, surely, indicates very negligent reading not to know that Kant, again and again, and very emphatically, declares the dynamic to be less apodictic, less pure—less cogent and powerful, then—than the mathematical categories. We can see for ourselves, indeed, that what is mathematical enters into and forms part of objects themselves—is constitutive; while what is dynamical only concerns relations *between* objects (taking no note now of those between objects and the mind), or is only regulative. The mathematical categories, therefore, are, in point of fact, more real, more existential, than the dynamical ones. Kant thinks it necessary to point out, as though it were something unexpected, that the dynamical categories have correlates and, so far, differ from the mathematical ones. But, surely, where the question is of *connexions*, one would be surprised *not* to have correlates. It is not out of place to remark here, either, that Hume divides *his* categories (and these are, with mention of time and space, quantity, quality, causality, resemblance, contrariety, and identity) into two main classes precisely similar to those of Kant. Hume himself names (*Treatise*, I., III., I.) the one class, "such relations as depend entirely on the ideas which we compare together," and the other, "such as may be changed without any change in the ideas." I take leave to call these two classes, respectively, intrinsic

and extrinsic, and these two words will be seen at once accurately to correspond, the one with Kant's mathematical, and the other with his dynamical, or with what is constitutive and what regulative. It is to the rest of the section that we particularly refer as bearing on Kant's successors.

§ 12.

I fancy most readers will find themselves rather disturbed than assisted by this section. It is certainly a very curious interpolation, and seems very superfluous. If the ancients are to be complimented with the possession of a transcendental philosophy because of these distinctions, why, we may be apt to think, does Kant omit all mention of many, to all seeming, quite as good, say in the πολλαχῶς λεγομένα of Aristotle alone? Surely, one thinks, ἀρχή, στοιχεῖον, φύσις, ὄν, ταὐτόν, ἕτερον, πρότερον καὶ ὕστερον, κ.τ.λ., have quite as good a right to be called into remark as *unum*, *verum*, *bonum*. When afterwards, in section 16, we find Kant referring to a *qualitative* unity and indicating this section 12 as the authority in place, we wonder if he can have taken all that trouble for nothing but this. The more usual form of the brocard is, *quælibet causa*, *una*, *vera*, *bona*, *sit oportet*. So we have it in Newton's first rule: "Causas rerum naturalium, non *plures* admitti debere, quam quæ et *vera* sint, et earum phænomenis explicandis *sufficiant*." Here Newton evidently means what is concerned to be, if possible, numerically one, actually existent, and actually adequate. In the applications of Kant, we should rather say that the meaning is self-consistency in an idea, truth in regard of its relations, and success in regard of its intention or end.

Deduction of the Categories.

§ 13. Principles of a Transcendental Deduction in General.

It is important here fairly to understand what is meant by *quid facti* and what by *quid juris*. Locke could show a number of actual instances of causality, as in eclipses, rain, frost, snow, etc.; and could say, there you have the *fact*, and, evidently, it is from the fact that you have the idea. That, then, is what is to be understood by the *quid facti*. But now Kant breaks in with, the *quid facti* has nothing to do with the question. In causality, namely, an idea of necessary connexion is present, and no reply to *quid facti* can explain that; for the fact, though sufficient evidence of itself as a fact, is no explanation of a validity which exceeds the fact. The fact is a matter of sense, and, as such, it always is as it is, and we can say no more about it. But when we say such and such rule *must be* in the facts, then evidently we must seek the source of such rule somewhere quite else than in the facts themselves. It will do no harm to anticipate here (at least to a certain extent), and say that Kant's answer is, *we* add the necessity to the facts by virtue of a certain system of transcendental schematism within us. One can see here also that Hume regarded Locke's procedure pretty much as we represent Kant to have done. Hume, indeed, just said to Locke, the *fact* is all very well, but no matter of fact is adequate to an idea of necessity; hence that idea can be due only to custom, or a natural instinct, or both. This will enable us to understand that the *quid juris* represents an appeal to the element of necessity in the facts to account for itself and make good its title—justify itself, or demonstrate the legitimacy of its own authority.

And, in the circumstances, it is quite plain that this can only be accomplished by means of a *transcendental deduction*—a deduction, or justification, that is, which, precluded from the *a posteriori*, is consequently driven into the *a priori*, where it finds to its hand a system of general elements of sense and understanding ready for, and in anticipation of, the intimations of special sense, or of experience. That is full, complete, and home.

This being understood, Kant endeavours to make it intelligible how *notions* (a *rule*, as in causality, must depend on a *notion*), quite as well as *perceptions*, may enter into and form part of the actual experience of sense. He indicates that the nature of a perception of sense proper is to be a complex, a composite, a manifold, a *breadth* of units or particulars, and that notions are necessary, through rule, law, order, and arrangement, to condense and consolidate these breadths of units and particulars into the unities of single objects, and the unity of a ruled and regulated context of experience of objects. He illustrates this from the notion of a cause. We might very well have perceptions, he says—and that, of course, means only *crude*, not *formed* perceptions—without any rule of causality being at all present in them, or, in fact, without any influence whatever falling from the understanding on them. But, in that case, experience would be wholly without any principle of necessity: we should never be able to say *then*, quantity *must* be an extensive, and quality an intensive, magnitude; matter *must* always be identical in amount; action and re-action are *always* equal, etc., etc. And this, probably, will suffice to make credible and intelligible the presence of notions in our actual perceptions of the objects of sense. How time and space, though *a*

priori, might condition the special perceptions which had to appear in them, and were only possible through them, was not, as Kant remarks, hard to realize; it is harder to realize this for notions, but we shall now assume even that effected. Of course, it will be easily understood, that necessity being impossible *a posteriori*, its source must be only *a priori*, or it itself a phantom. Hence the indispensableness of a deduction, a justification, an explanation, a vindication, a proof which is *transcendental;* for transcendental refers with Kant to the demonstration of a whole system of *a priori* and non-empirical principles which, entering into, and forming part of, all empirical matter, become as much real, objective, and, so to speak, outward elements of actual experience as that matter itself. In short, a transcendental deduction is a verification of *a priori* powers by an illustrative argumentation from the necessities of the case—the conditions of the very possibility of our experience: the necessity of the machinery employed is deduced, justified, or demonstrated by the *rationale* of its action. And it is again suggested to us here, that, though the terms *a priori* and transcendental may frequently be indifferently used, and frequently are so used, yet that there is a certain distinction between them. In fact, one and the same thing is quite capable of exhibiting not only, firstly, an *a priori* aspect, and, secondly, a transcendental aspect, but even, thirdly, an empirical aspect. Space, for instance, as it is applied in geometry, may be seen to be in its nature *a priori*, while, on the other hand, in looking at that house, or this tree, or yonder star, it is quite as evidently empirical. But, again, when we recognise space to be an *a priori* element and yet, in its own force, actually present in, and constitutive of, objects and the validity of objects, experience and

the validity of experience, then we are aware of an element that is transcendental—an element *a priori* and empirical at once. A transcendental deduction, consequently, makes good the legitimacy in facts of a validity in facts to which (validity) facts as facts are quite incompetent, while a deduction that is empirical contents itself with simply pointing to the facts as facts. It is evident that geometry is quite free to proceed in its own way without a question of *a priori* space as its basal principle; but, when there comes to be a question of the peculiar action of the categories on the actual facts of experience, it is no less evident that, for a complete *rationale* of what is in question, space quite as much as the categories will demand a deduction which can be only transcendental—demonstration, that is, of *empirical* action on the part of an *a priori* element.

We have in this section at least one example of how difficult it is to avoid verbal contradictions in the use of the word perception. "The categories of the understanding," it is said, "have nothing to do with the conditions of perception;" and yet, immediately afterwards, we are made to understand that these same categories "furnish conditions of the very possibility of all our perception." The contradiction depends upon this, that the first perception spoken of is elemental perception, sensuous objective presentation considered only as that; while the second perception is the formed perception of experience. Perception as perception, what we may call elemental perception, is that which has before it, no matter whether subjectively or objectively, a presented complex of sense; and in such presentation, so long as it is only sensuous, the categories, as non-sensuous, have evidently no part. Nevertheless to make objects

of subjective presentations, experience of mere appearances to sense,—in a word, *formed* perception of *crude* perception, it is precisely the categories that are required. The reader must be on his guard whenever the word perception appears.

It is important to call attention to the fact here that Kant is perfectly well aware of the possibility of the one perception, even *without* categories to convert it into the other. "There certainly may very well be presentations of objects, without there being any necessity to refer them to functions of the understanding at all;" "understanding *need* not involve any share in the formation of objects;" "presentations may be given in sense without calling in understanding;" "presentations might very well be such that they would involve no harmony with the unity of the understanding;" "there might be nothing in them correspondent to the notion cause;" "presentations in sense would not the less for that furnish us with objects so far perceptive;" etc. These passages, consequently, are a curious comment on the ascription to Kant of the doctrine that the possibility of succession as succession depends on the pre-supposition of the succession causal! Evidently to Kant's mind there might very well be in the sequence of phenomena no principle of synthesis whatever.

To repeat. The phrases *quid juris* and *quid facti* felicitously indicate the whole inquiry. Locke, for example, shows the latter—the what of the fact—but it is Kant that, in view of a fact of sense with claim to a validity beyond a fact of sense, shows the former —the legitimacy and right, the title, guarantee, and warrant of this claim of the fact. When we wake up to the question of whence such notions as fortune, fate, etc., the explanation or justification which may

be supposed to follow will illustrate what is meant by a deduction. But should there be other notions manifestly empirical, but of a force that is as manifestly supra-empirical, these notions will very specially and peculiarly call for a deduction. This deduction, further, precluded by the very terms of the case from any reference to what is *a posteriori*, can only turn to what is *a priori*. A deduction now of empirical functions on the part of *a priori* principles is a transcendental deduction. What is *transcendental* is not *transcendent;* that is, it is not transcendent absolutely of experience; it is *in* experience, but transcendent of the element of sense in experience. Of course, what is transcendental being found in experience, and without experience, indeed, not possibly to be found, there is always room for an inquiry into its empirical occasions and into the forms and facts of it as in experience. For showing us the way to such an inquiry as this, we have to thank Locke. But no such inquiry, limited as it is to the mere exhibition of a fact, will ever explain the presence in that fact of an authority and reach which are utterly beyond and absolutely above, not that fact, but simply any and every *fact* (*i.e.*, of sense). There is here evidently a quite transcendental element that demands a quite transcendental deduction.

Such a deduction was easy for sense-forms, for the sense-forms of space and time, inasmuch as these forms are themselves perceptive objects, and are readily seen and understood to become part of all perceptive objects; but the case is quite otherwise with notions. How can what is intellectual become sensuous, what is discursive become intuitive, become perceptive—how can a notion be seen, touched, handled, or heard? Well, quite evidently, they

cannot, materially, enter into perception: they can never be so much stuff actually presented. Still they may enter *formally* into experience. They cannot be precisely perceptive, as so many individual objects; still they may be perceptive, actually perceptive, as so many *connexions* of objects: they may be objectively connective, and, as objectively connective, necessarily, so far, objectively perceptive. There is the notion cause, for example. It is not itself an object; still it is a connexion among objects; and it is actually perceived as such.

Now, so far as objects themselves are concerned, there seems at first sight no necessity for any such principle of connexion. There is the cause A and the effect B; but A is A, B is B, and each is an object on its own account; there seems no reason why there should be any connexion between them, why A should not follow quite as much as precede, and B precede quite as much as follow. It is not at all manifest beforehand why experience should contain such a connexion, such a principle of synthesis. It is plain that objects must obey sense and be subject to conditions of sense; but it is not at all plain that they may not be independent of conditions of the understanding. It does not even settle the question and end our difficulties here to say that such connexions, principles of synthesis, actually are. For we naturally turn and wonder then how *can* such things *be?* Experience may certainly, indeed, give us abundant opportunity and occasion for observation of the *fact* of causality; but no experience can explain the validity (that is, the apodictic authority) of the fact. A principle of such authority must either be *a priori* (it simply cannot be *a posteriori*), or it is hollow, null and void, meaningless, a mere delusion that does not

exist at all. Experience is only competent to declare that so and so usually, but not necessarily and universally, happens. Causality has a dignity and worth, then, other than empirical: the effect does not follow the cause as merely added to it, but as implied in it and occasioned by it. Hence the necessity of a mode of explanation that is beyond the experience of sense; or here of a *deductio juris*.

It is easy to see how it is that we have arrived here. Hume seemed to demonstrate that, the proposition of causality concerning a *matter of fact* and not a *relation of ideas*, there could be no source for the necessary connexion we attribute to it, but the power of custom. This struck Kant, and he was led to *inquire*, when it presently occurred to him that the apodictic necessity attributed to the proposition really existed, at the same time that custom was totally inadequate to yield any such validity. The suggestion, then, plainly, immediately was, *How* could there be apodictic evidence in what, after all, was a matter of fact? As Hume said, no such evidence could attach to it so far as concerned the precise element of fact, the precise element of sense, or the experience of sense. For any such element (of sense) we had always only to wait, and take it as it came. That is, any such element came to us only *a posteriori*. So far as concerned what was *a posteriori* in the proposition, then, there was no possible origin of the validity in question; but what of the *a priori*, and of the *a priori* as such? We called *applications* of principles only *a posteriori* in their original source, inferences *a priori;* but the *a priori* of which there was question now must be an absolute *a priori*. Further, conceived to oppose the *a posteriori* of sense as a source of cognitions, such *a priori*, if to yield other cogni-

tions, must simply be an *a priori* of our cognitive faculties themselves. That is, into the *a posteriori matter* of knowledge, there will be thrown *forms* of knowledge from the mind itself. It is to some such form actually present in the proposition of causality that we must attribute its peculiar validity. Obviously, then, it will greatly assist us to a complete discovery of said forms, if we inquire whether there are not other such propositions as the proposition of causality. Now, Kant, to his own belief, found a variety of other such propositions, some empirical in the manner that the causal proposition was empirical, and others non-empirical or pure. It was the mathematical field exhibited the latter, and it was especially in consideration of these that Kant was led to assume the *a priori* nature of space. But space could only be followed by time in a like reference. These now, then, would constitute the *a priori* contributions of sense, but what now of those of the understanding? Now, Kant could not think any such question of the understanding without being immediately referred to Logic, which is the science of the understanding, and the rather that this science was itself, evidently, of a demonstrated non-empirical or *a priori* nature. Here, too, it would necessarily occur to him at once that, while sense contributed what could be called *material* elements, understanding would contribute elements, again, that were only *formal*. But what was formal, not being at all of the nature of stuff, and yet acting on stuff, the stuff of experience, could only refer to *connexions* in and of stuff, in and of objects.

Now the sections before us, 13 to 20, both inclusive, may be said introductorily to handle precisely these subjects. That is, Kant, with *connexions* now necessarily occupying and absorbing his attention,

applies himself to the consideration of synthesis as synthesis. Any synthesis within the mind, even of elements contributed by sense, he conceives, in the first place, to be placed in the imagination. But the imagination is at once under the unity of self-consciousness which, to make any complex contained in imagination its own, must connect every unit of that complex to its own self, and, consequently, all together to one another. The result, evidently, is synthesis. It is self-consciousness, then, that synthetically establishes unity in every act of knowledge; and without self-consciousness there is not even the possibility of any unity in knowledge. But it is self-consciousness understands, or, what is the same thing, it is self-consciousness judges. Now a judgment is only a certain adjustment of focus, so to speak, to the unity of self-consciousness; and of this unity there are twelve such *foci*, or this unity is susceptible of twelve *modi* under the twelve functions of judgment which logic presents to us. In this way, towards synthesis, there is first the pure sense-material of time and space; second, the taking possession of this material by imagination under self-consciousness; and, third, the reduction of this material so placed into twelve *a priori* forms of synthesis under the twelve functions of self-consciousness (or judgment). These forms, now, being there only as checkers for the reception and elaboration of the contributions (colours, feels, etc.) of special sense, are manifestly to be called transcendental. We may add, what we stop short of here in our text, that Kant proceeds to complement these twelve *constitutive* transcendental principles derived from the forms of the judgment, by three *regulative* transcendental principles similarly derived from an assumptive analysis of the forms of the

syllogism. These are the three *Ideas;* and for result, Kant supposes that he has thus explained how, out of our own subjective affections, we have this actual world before us, and not only as objectively perceived, but also as (under the *ideas*) theoretically reasoned. We are to conceive, consequently, that we have here in Kant a *metaphysic* as well as a *theory of perception*, though, in the present volume, it is to the latter we confine ourselves.

§ 14. Transition to the Deduction of the Categories.

The intellect, through its notions, if at all contributive, so to speak, to the bolus of experience, will not be able to contribute any stuff, but only connexion, or, as it were, focus to stuff (sensuous stuff); and that connexion or focus, as depending on notions, will be readily realized if we conceive these notions to amount to rules (as that of causality, for example). So only it will be that intellect, as factor in perception, can be understood to make even actual objects (experience) at all possible.

That the notion of an object at all is not a matter of sense (affection), but of intellect (function), will not cause difficulty. Substance is what Kant himself has here in mind. That what the sense-elements unite in should be conceived or perceived as a substance, it is that Kant thinks of as no contribution of sense; and we have seen the same thing repeatedly already (*Introduction*, II., at end; also § 1, paragraph 4). But as regards the notion simply of object as object, Plato may be referred to. Socrates asks Theætetus (184 D-186 D) whether it would not be strange that our various senses should not meet in "a certain one idea," to be called "soul" or other-

wise; whether there are not more things in perception than can be referred to "the body;" whether what things are perceived by one faculty, it is impossible to perceive by another, as what by hearing, by sight, and what by sight, by hearing; and whether, at the same time, they are not conceived together, while this community in their regard must be perceived by something that is neither sight nor hearing; whether also there is no organ proper for discovery of this unless precisely the soul itself; whether, consequently, some things are not perceived by the soul itself, and others by faculties of the body; whether, then, the general conclusion is not: Ἐν μὲν τοῖς παθήμασιν οὐκ ἔνι ἐπιστήμη, ἐν δὲ τῷ περὶ ἐκείνων ξυλλογισμῷ (there is no science in the affections, but in the reasoning about them)? This reference, probably, will sufficiently illustrate the consideration in hand. Schwegler (*Handbook*, 71) sums up here:—"Protagoras knows not the *a priori* element of knowledge: it results from an analysis of sensuous perception, that not the whole sum involved in any one act of perception is produced or introduced by the action of the senses, but rather that, besides this sensuous action, there are implied as well certain intellectual functions, and, consequently, an independent sphere of extra-sensuous knowledge" (but see further). It is to be observed that it is Kant, and not Plato, has introduced the term *a priori* here. In reference to this term, we may here remark, also, that it is not verbally correct to refer it to Hume in that sense, or to say that he (Hume) saw it to be necessary "that said notions should be possessed of an *a priori* origin." Hume certainly asked after the origin of such a notion (the necessity that was present in causality), but it is not the literal truth to say, he saw it must be *a priori*.

It was only Kant saw that. Hume saw only that necessity could not be a product of sense, could not be *a posteriori;* but he was not led thereby to the *a priori* of Kant. Rather it pleased him to prove that said origin could neither be *a posteriori*, nor yet—in his sense of the expression truly—*a priori.* We saw the necessity of the one billiard ball communicating motion to the other, neither *after* the fact, nor yet *before* it. With this small gloss, all else in Hume's reference is correct—all here, on the whole, is perfectly well said, indeed.

Kant is too perfunctory as regards his "definitions of the categories." The example of substance, if, from step to step dwelt upon, will be found perfectly determinative; but the statement of it does not run well, and the reader is apt to neglect it. Rather than this, however, the reader ought to pause here, and make plain to himself how it is that each special category is specially derived from each correspondent function of judgment (or form of the judgment), as causality, for example, from antecedent and consequent. In short, the categories collectively are the entire systematic tree of the logical functions of judgment, applied determinatively to *a priori* conditions of perception (time and space) —and so *a priori* prescriptive of how experience shall be. That is in sum all that *transcendental* means—the entire *a priori* that, out of an *a posteriori*, renders an *experience* possible.

§ 15. Of the Possibility of Conjunction in General.

Sense, whether special or general (time and space), is only passively recipient. If what it receives does not lie there as it simply *is* received, but becomes a subject of synthesis, this must be an action beyond

sense, and, consequently, one of the understanding. But synthesis, being a uniting, a union, involves a principle of unity. Nay, analysis itself presupposes synthesis. But this principle must evidently be more than the category of quantitative unity: it must, in fact, be qualitative. What, then, is this principle of qualitative unity? It must be the general principle of unity to the categories themselves—the general principle of unity, indeed, to the understanding itself (imagination included).

Kant is not at all clear, simple, and methodic in his explanation of synthesis: it is a long time before it finally comes out, and is finally seen in all its parts. The reader ought at once to know that self-consciousness, the unity of apperception, is the single general principle, and that the categories are simply particular functions under it; lastly, that the vehicle of all synthesis—*to* affection (special, general, or both), *through* function (the categories), *under* unity (the unity of apperception)—is imagination. It is worth while pointing out that now the use of § 12 is seen: it was introduced for nothing else than to give the expression *qualitative* unity! As regards the necessity of a general principle of unity, it is to be borne in mind that judgments at all already involve such principle, and that the categories are but derivatives from judgments. In fact, it all runs thus:—

We obtain a complex, or variety of particulars, from sense. Among these particulars combination takes place. This combination cannot proceed from the senses, which simply *give*. It must be an act of the spontaneity of the subject, consequently, of the understanding of the subject. This action of the understanding, which is a general one, and of universal application, we name *synthesis*. Synthesis, too, must

precede analysis, for we cannot detach unless we have, first of all, attached. Again, combination involves an idea of unity, an idea of synthetic (conjunctive) unity. This idea, then, must even precede and condition synthesis itself. Where is its source? Not in the categories, which themselves presuppose synthesis, the synthesis of judgment. Where, then, but in a general principle operative of this same synthesis of judgment, which principle, evidently, must condition the action of the understanding itself.

§ 16. Of the Synthetic Unity of Apperception.

This is an all-important consideration; and Kant must be allowed to have made a distinguished notch in it. All, however, is so plain here that comment seems unnecessary. "We can all fancy an ego, an I —fancy it as a unit or unity, as the primal unit, the primal unity. Well, to feel, to know, this unit must be, so to speak, *charged* with something, an *object.* Now, this object, whatever it be, has parts, it possesses a certain breadth, it is, as compared with the unit into which it is received, a complex, a manifold; and it is by connecting the various units of this manifold to each other and to itself that the primal unit or unity, the ego or I, can come to possess, or, what is the same thing, to *know* an object" (*Lectures on the Philosophy of Law*, p. 3).

Kant, we see too here, assumes as it were two I's, the pure I or I think of bare self-consciousness, and the concrete I of empirical feeling. Each of these, however, may be seen to be identically the same I, but with different filling.

Here, too, we have Kant's doctrine of the possibility of more than one kind of perception.

It may be worth while to point out that *apperception* is *perceptio—ad.*

Of course it is to be understood that it is imagination and the categories bring the *breadths* of objects under the focus of the single general principle.

Lastly, what concerns analysis, as opposed to synthesis, and especially personal identity, should be well considered here. As regards terms we see clearly here that *transcendental*, as applied to the unity of apperception, means something that is indicative and explicative of an *a priori* element in what is empirical.

§ 17. This Synthetic Unity the Ultimate Principle of Understanding.

Anything here simply corroborates what immediately precedes. The essential conditions of perception as perception are very clearly put. What space and time, too, are to Kant is well seen. Note also the doctrine of a plurality of understandings, etc. We see here *Anschauung* rather to convey crude perception, and *Erkenntniss* a formed perception.

§ 18. Objective Unity of Self-Consciousness.

That perceptive units are cemented together and into a single unity, is attributed to an objective function on the part of the unity of consciousness. This, then, being the objective unity of consciousness, and really resulting in what appears an alien object and in relations of necessity, is to be distinguished from the subjective unity of consciousness, which refers only to the successive moments of actual feeling in inner sense as perceptively affected. Now this subjective state of consciousness has its own importance,

for it is the first factor towards production of all the formed objects of actual experience. It means, in fact, the whole of what is empirical in objects. But what is empirical in objects is, in a certain way, these objects themselves. Let consciousness contribute to that whatever it may, it evidently cannot contribute anything substantial. The empirical element is astronomy, and meteorology, and geography; the empirical element is the whole of history, Greece and Rome, Pericles, Pompey, and Augustus Cæsar; the empirical element is this paper, pen, and ink, this desk, table, carpet, room, that window and the garden outside of it. It is absurd to suppose the transcendental element to have more than a mere function of arrangement here. Nay, Kant would not seek to ascribe any such power to consciousness, and to exclude arrangement from the empirical element itself, were he not under the conviction that the whole of that element was only subjective sensation, which could, consequently, as being within, be only further manipulated from within. Still sensations were, for all that, the whole burthen of time and space, the whole contents of experience, the whole contents of history. All this is implied in that single sentence: "Whether I shall be empirically conscious of the units in sense as themselves co-existent or themselves successive the one to the other, depends on circumstances, or empirical conditions." We know that all units in sense are held by Kant to be successive the one to the other. Still there are circumstances, empirical conditions, actually accompanying the units in sense, in such wise that they enable us to pronounce whether these units—*in the object*—are to be held as together or as only after one another. That is, it depends on circumstances, on empirical condi-

tions, whether the units are such as to call for the categories of quantity, quality, substance, reciprocity, etc., or for that of causality. Further, there is that in these sense-units themselves which determines them as independent of the succession of time, though in the element of time. In fact, when all that has been considered, the transcendental elements will be found, so far as their possible application is concerned, to be very peculiarly and heavily weighted. It is doubtful, indeed, whether, apart from consciousness itself, much or anything will remain for the transcendental elements as actually named, should Kant's mistake be corrected, and knowledge of units in sense be recognised to eventuate in knowledge of actual things without.

It is as dependent on the *a posteriori* element that the empirical consciousness ("the empirical unity of consciousness" means no more than that) is called "contingent." That concerns special sense; but Kant will have it that general sense is different. The consciousness of what belongs to general sense (time and space) is, as concerning what is *a priori*, itself *a priori* and necessary.

In this section we have that use of the word *objective* which is so current in Kant's moral treatises. What is objective in a moral sense, namely, is what is valid always and for everybody. In the language of the text, what is "*objectiv gültig*" is "*nothwendig und allgemein geltend.*" The objective unity of consciousness, then, may be conceived as extended into its action on time and space. Such unity of general sense under consciousness will be seen to underlie any consciousness due to special sense, which is the empirical consciousness. The empirical consciousness, also, as an affair of sensation, is easily seen to be con-

tingent and subjective. Of course, it is not the empirical, but only the transcendental consciousness, that is under the discussion of Kant.

§ 19. The Logical Form of all Judgments, etc.

We here see, what from the general situation is very credible, that Kant wants to identify the act of pronouncing a judgment with that of realizing our subjective impressions into actual objects. This follows from the fact that the categories (which are the agents of objectivity) are, in essential nature, judgments. So it is that to Kant the copula, the "is," simply pronounces objectivity. The units of special sense are pronounced to have collapsed, or to have eclipsed themselves, into the *a priori* focus of objectivity, which, in forms of general sense, in categories, in apperception, has been prepared for them. These units are in themselves contingent (say any particular effect and any particular cause), but it is as received into said focus that they take on necessity of nexus. The focus concerned is, as it were, a referential conjunction of differents to each other in objective apperception. The probability here is that Kant is only dominated by his own needs—judgment *shall* objectify the mere subjective relations of ordinary association—but it is enough as yet simply to understand. It is not wonderful that Kant, with his pure objective understanding now ready there to his hand, should wish to judge into it, subsume into it, objectify into it, his subjective units of mere sense. It is in this way we see how it is that necessity gets insinuated into units which are themselves only empirical and contingent. I have no doubt that Hegel's use of the word might have been suggested by *Urtheil*

here. That is the *primitive parting* when the universal subject recognises, *or parts into*, objectivity.

§ 20. All Perceptions of Sense stand under the Categories.

Having realized the last step, we simply expect the present one: the categories are the system of what judges subjective impressions into the objective actualities of experience.

§ 21. Remark.

Comment here is not required. Note only again Kant's doctrine of man's intellect being simply a certain inexplicably *given* one—a given one out of many possible others. The idea of the universe as a one absolute product, of a one absolute reason, seems never to have dawned upon Kant.

Between sense (general and special) on the one hand, and understanding, judgment, self-consciousness (in its categories) on the other, there must always be conceived to play or ply the productive imagination.

§ 22. Application of the Categories.

This is only an insistance on the two sides necessary to our sort of intellects: notions without perceptions are void; perceptions without notions are blind.

§ 23.

We see here again that peculiar doctrine of a possible plurality of intellects: *our* categories would still hold good with *other* senses. Still, this important

necessity comes out, that the sense-matter, be it what it may, must at least *correspond* to the scope of the categories.

§ 24. Application of the Categories to Sense.

The two sides, of understanding and sense, again insisted on. How what is *a priori* in the one may coalesce with what is *a priori* in the other to the production of the entire provision of transcendental forms—those forms, namely, which though *a priori* in themselves, are yet empirically present with the actual *a posteriori* of sensation. The synthesis of the one side and the other, intellectual and specious, very clearly put. The full force of transcendental—an *a priori* that is also *a posteriori*—is very well seen. The *rôle* assigned to imagination is also very plain; and in that reference, it is easy to understand that reproductive imagination, or what is otherwise called association, the association of ideas, is excluded from transcendental discussion for precisely the same reason that we saw in bar of empirical consciousness (§ 18). But this, at least as far as the asterisks, is probably the most crucially decisive section in the whole of the deduction, and, simple though it be, we had better, perhaps, treat it more at full.

What we have to attend to here, then, are the three expressions: the intellectual synthesis, the figurate synthesis, and the transcendental synthesis of the imagination.

1. The intellectual synthesis is simply the categories, or all that is involved in the function of a category. I have called it elsewhere the multiple (which is also a unity) of the category. Each category, that is, is the unity of an intellectual multiple

(as antecedent and consequent), and is there to act, in its unity of function, on any many of affection (human or not) that may in some way (say any actual case of cause and effect, as the sun rising, a stone warms) correspond to it. Each category is but a form of the unity of apperception. As such form, too, it is evidently only intellectual or logical; that is, it is only formal or void till filled by some due particulars of affection (sense) actually submitted to it. So it is that the categories condition the possibility of such an experience as ours that rests on affection of sense. This synthesis, viewed apart and in itself, is purely intellectual; but it is also transcendental, for its empirical application is the purpose and use of it.

2. The figurate synthesis is the result of the action of the intellectual synthesis (or simply the categories) on the *a priori* sense-matter of us, that is, on the many or particulars of time and space, which are the constitutive complex of our *a priori* or general sense. Time and space are to be conceived of the nature of impressions, and to lie in our sensibility or receptivity of impression, but still to be *a priori* so, and to lie *a priori* so, as a transcendental provision in reception of the products of subjective sensation towards objective experience. Our understanding synthetically acts on the various units of these *a priori* webs, and in such wise as to realize into the synthetic unity of apperception various *a priori* and transcendental schemata. It is evident that all objects of experience must stand under the conditions of this general transcendental machinery. It is evident also that all such objects, so placed and so constituted, cannot be noumena or actual things in themselves which we only come to and take up, but, as in every way

simple constructions of our own out of our own subjective thought-forms and our own subjective sense-affections (a certain matter), mere phenomena or appearances to sense.

3. Now, again, it must be seen that if we are to look for the seat of the figurate synthesis, that seat can only be in the element of imagination; for it is imagination that is the seat and the element of all that is perceptive or exhibitive, whether in the so-called thing from without or idea from within. Imagination, that is, holds at once of sense and of intellect; it is sensuous in that it exhibits, and it is intellectual in that it is self-determinant and can exhibit an object, even when no object is presented to it. Our *a priori* perceptive synthesis under the categories, then, may be styled transcendental synthesis of imagination. Imagination, here, too, evidently, must be conceived as productive and not as reproductive. Productive imagination we can easily realize to ourselves by conceiving it to act on *a priori* space to the production of any kind or amount of geometrical figuration.

The rest of this section, what follows the asterisks, is a piece of as slovenly and unsatisfactory writing as is to be found in the whole of the present *Kritik*. The theme is that, not only do we know objects, not as they are, but simply as they appear, but even our own subject we know not in any respect differently: this subject, our own ego, our own self, we know not as it *is*, but only as in sense it *seems*. An object is a subjective sensation, in the subjective elements of time and space, and as subjectively determined into synthesis by the subject's categories, under the subject's unity of apperception; and precisely in the same manner the subject, any state of the subject,

is a subjective affection in the subjective element of time; it is, so, a manifold subjectively determined into synthesis by the subject's own categories, under the subject's own unity of apperception; which unity, further, is only a thought, and not a perception, not a complex, not, so to speak, an object. All the moments of Kant's discussion are contained in the above; but what he seems to labour most at, is the idea that the subject is to itself only as to itself it determines itself (alluding to the action of the intellect, on the complex of affection, in the many of time). The other main moment is, that anything to be anything must have a perceptive complex, a perceptive complex to be then categorized and understood, and that apperception, the bare "I," or "I think," has no complex whatever and is only a thought, a reflection, a mere logical connecting act. The general position I shall not criticise, but I may add this. In my first article on Mr Buckle (*North American Review*, July 1872, pp. 95–98), there is considered, almost in detail, what is now under discussion, and what I allude to in the *Schwegler* (p. 105) as "that peculiar view of Kant in reference to an inner sense over which poor Mr Buckle has so stumbled, this, namely, that knowing our own inner like our outer, only *sensuously*, we know it not as it is, but as it *seems*." It is worth while realizing Buckle's "it is only just to," etc., here!

On the whole, the text may be taken to run thus:—

That internal sense should exhibit to consciousness our own selves, not as we *are*, but as we *seem*, and because we perceive ourselves only as we are internally *affected* (in such a case *by* our own selves, that is, which involves a contradiction apparently at once) —this, a necessarily surprising paradox, requires ex-

planation. We, namely, contrary to custom, widely discriminate, as two different independent powers, inner sense on the one hand, and self-consciousness on the other.

What brings the complex of inner sense into apperception (which for definite cognition—sense being merely passive—is a necessity), is, in its synthetic categories, the function of the understanding. Understanding unites, but has no manifold of its own; perception has the manifold, but does not unite. The synthesis of understanding, consequently, is but an act—of course, so far, a self-cognisant act, but, as yet, without objective filling. To contribute this filling a sense is necessary. Such, then, are the relations of apperception on the one hand, and an inner sense on the other. The one, as sole source of synthesis, is the universal *prius;* and its synthesis is a necessity for the other, which, else, would be a mere indifferent and indefinite many of passive affection — in a certain general perceptive form, truly. As regards any information of inner sense, namely, it is we ourselves make it for ourselves. An inner affection is an affection set up in ourselves by ourselves; and further, to make cognition of this affection, it is we ourselves must, by categories of ourselves, gather it together into an apperception, a self-consciousness, which is also our own.

Here, in short, Kant is simply as everywhere. He believes in the possibility of a variety of general modes to know or perceive. There is the possibility, first, of what he calls *intuitus originarius*, an understanding that, as understanding and directly in its own self, is at once perception; and there is the possibility, second, of an *intuitus derivativus*, of an

understanding that is only an intellectual act, and, though with a variety of functions, is only an act and formal merely, vacant merely, till materialized, till filled with the material which shall be supplied by a sense. Further, Kant evidently believes that two or more understandings might, while provided with identically the same intellectual functions, exhibit an absolutely different supply of senses or groups of senses. Now man's mind is only a mind amongst minds; and its peculiarity is to be such and such an apperception, articulated into such and such categories, and seated on such and such general forms of sense. To man, then, a cognition is always an affection of his sense in one, or other, or both of its two general forms (space and time), gathered by the synthesis of his categories into the unity of his apperception, or, shortly, it is the many of his affection in the unity of his function. But, so, evidently, a cognition from within is quite in the same way constituted as a cognition from without. Consequently, if a cognition from without is only known to us as it *seems* and not as it *is*, it cannot be different in that respect with a cognition from within. There, too, we only know our own subjective state as further manipulated by machinery of our own. With such beliefs before him, it is evident how remote Kant must have been from the bare thought of an absolute experience, from the bare thought of existence as existence, and, consequently, from the bare thought of a philosophy as philosophy.

Kant's exemplification of the action of productive imagination is clear enough in itself; and it must be now plain how it is that apperception, as only an act and without matter of contents, is different from inner sense, which displays a matter, and yet that it

is the same subject that is concerned, a subject which, in such circumstances, however, can be known not as it *is*, but as it *appears*. That we should, in this way, only know ourselves *phenomenally*, however, is not, in the least, more difficult than that we should know ourselves at all. For the words, "In that I can conceive other modes of perceptive cognition as at least possible," to substitute these, "For an understanding that should at once *perceive* itself is conceivably possible," may seem violent; but as it is the *intuitus derivativus* that has been under debate, it is only the *intuitus originarius* that can be the *other* "mode of perceptive cognition" parenthetically referred to.

§ 25.

The same subject continued; the mere formality of apperception, and as requiring a perceptive complex from elsewhere, is particularly insisted on. But on these points there has now been enough said.

§ 26. Transcendental Deduction, etc.

By italicising *empirical* in the title, and carefully translating according to the designed powers of the words in the original, I shall hope to have made clear the peculiar purpose of this section, which, considering what precedes, has sometimes, and not unnaturally, caused question. It is not unapt to be overlooked, namely, that Kant, occupied hitherto with *general* perception, conceives himself now only for the first time to approach the consideration of *particular* perception, special sense.

What the one deduction and the other (metaphysical and transcendental) precisely mean will now

be set beyond doubt. The latter, it will be observed, is said to make manifest the "possibility" of the categories; but possibility with Kant *may* mean pretty well actual existence, fact of existence, or even necessity of existence. I should say that it is the purpose of the transcendental deduction to urge the indispensable need of categories, in order to produce, or in order to account for, the presence of necessity in the actual facts of sense, or, what is the same thing (inasmuch, evidently, as synthetic necessity, excluded from the *a posteriori* of sense, can originate only *a priori* in the understanding), the presence of the *a priori* in what, nevertheless, is undoubtedly *a posteriori*. Kant himself has the expression, how manifest matter of special sense can "stand under laws, which have their source only *a priori* in the understanding itself." This will be at once understood if we only intercalate after the "which" the words "as necessary." Laws, namely, which are apodictically necessary and non-contingent, being unavoidably precluded from the *a posteriori*, are manifestly shut in to the *a priori*, and that is the understanding (for what is, but is not in sense, must be in the understanding: there is no other alternative).

It may be worth while remarking, that we ought to take such expressions as "dictate laws" and "make nature itself possible" with the due grain of salt. These laws are, after all, only the categories of relation, causality, reciprocity, etc., and the necessity which we attribute to them as apparent in the things of nature does not exist there. So far as these things are concerned, indeed, the necessity in question is not intrinsic and original, but extrinsic and borrowed. It is only the show of a necessity transferred; it is only the reflection of a necessity from where it does

exist to where it does not exist—*through a mere analogy*. The vast laws we impose on nature, then, are (for Kant) simply fictions. And yet how very common it is to find people daring to breathe only awful whispers of Kant as discoverer at last of the very seat of nature, and consequent creator of the deepest and most mysterious of philosophies. Nevertheless, all that is but a dream, and there are few things in truth simpler than what Kant has to show.

We then learn that what is meant by *apprehension* is the empirical consciousness of any sense-many. We are further to understand that the word generally applies only to the *subjective* state consequent on any sense-impression; it does not follow, however, but that it may exceptively apply to the same state *after* it has been made objective by action of time, space, and the categories.

We are next told that this first state of subjective apprehension must take on the form of general sense (time and space). But the further intimation is that these forms have already *a priori* undergone the action of the synthesis of apperception and the categories. It follows, in conclusion, therefore, that even all *empirical* apprehension must be submiss to the *a priori* or transcendental machinery. And to bring out as much was the object of the section.

The rendering of the expression "einer gegebenen *Anschauung*" by the phrase "of an inherently given perception" may prove, in its elucidation, neither unsound nor unacceptable. It is always to be borne in mind that Kant distinguishes between a faculty of perception and a faculty of sensation, and that he credits us with both. His "gegebene *Anschauung*" here, then, can mean nothing but that provision of a perceptive manifold with which he considers us to be

a priori endowed; or his word "given" must be conceived to possess the force of *a priori or inherently given.* What is so given, too, is *Anschauung überhaupt*, general perception.

It is now that we perceive what was meant in § 21, by the words: "From the manner in which empirical perception is given in sense, it will be shown in the sequel (§ 26) that the unity of this (empirical) perception is no other than that which the category, according to the preceding § 20, prescribes to the units of a general perception inherently given; and by the demonstration, consequently, of the category's *a priori* validity in regard of all the objects of our senses, the design of the deduction will be then at last fully accomplished." Readers of Kant, as has been already remarked, may have sometimes felt a difficulty in regard to this; but we shall hope now that any such difficulty has been removed. We may remark here, too, that, in the passage quoted, there again occurs the phrase "a given general perception," without doubt in the same sense.

On the whole, we do not hesitate to admit that whatever unity of synthesis has been found binding for space and time will prove binding as well for all empirical apprehension in these. That such synthesis is given *with*, not *in*, these forms, must mean, that it is not *they*, in their *own force*, extend it. In this last respect, they can prescribe only, each the peculiar succession of its own constitutive units. It is only as acted on from elsewhere that they have any part in the synthesis in view, and so it is that this synthesis is to be understood as given *with*, not *in;* or we may suppose that it is only the *succession* is *in*, while the synthesis is simply *with.*

The greatest point of difficulty here, probably, de-

pends on the footnote, at least when put in comparison with the text. The note is to this effect: The matter of *a priori* perception, *while still only sensuous*, is to be conceived as no more than an indefinite potential manifold of indifferent sense-units. Synthesis cannot come to it from sense as sense: such virtue is an affair of the understanding only. But still space and time are conceived by us, not only as such indefinite sense-forms, but also as, so far, definite objects, each with its own peculiar complex of constitutive units. That is, they are conceived as already under synthesis. Now it is here that our difficulty emerges; for while the text plainly includes the participation of the categories in the synthesis, the note seems equally plainly to exclude it. The unity of synthesis, it is declared in the latter, was "attributed to sense in order only to signalize that it was prior to every Begriff," and yet we are immediately led to understand that this synthesis is necessarily presupposed in order to make "possible any Begriffe of space and time." From what we learned, a good way back, in regard to synthesis in general, we interpret this to mean that the synthesis of imagination under apperception was what happened first, and then it became possible for us to have *Begriffe* of space and time. But by Begriffe so used, we must understand Kant to mean mere *Vorstellungen*, mere conceptions, what is generally understood by the word *ideas* as currently and loosely used. The *notion* of space, in short, according to this usage, is simply space as it is before consciousness, and of course we know such sense of the word to be quite current in Kant. It is the same word, however, as it appears in the next sentence, that constitutes the special difficulty, and it does so doubly. "As through this unity of synthesis (in that understand-

ing determines sense) space and time are first given as definite perceptions, it is to space and time that the unity of this perception *a priori* belongs, and not to the Begriffe of the understanding." Here not only this last "Begriff," compared with the other two, is not the same, but even the action of the understanding which is expressly asserted in the first line seems no less expressly excluded in the last. What is meant can only be this, however; the synthesis of imagination precedes any Begriff as idea of an object, but Begriffe, as mere ideas of an object, do yet, in regard to the manifolds of space and time as primarily only in imaginative synthesis, precede any action proper of a category. But the other half of the difficulty remains. Here in the note the category is in this manner expressly excluded, while in the text it is in so many terms affirmed. There cannot be a doubt, indeed, but that the single purpose of the whole section is to declare that all sensuous apprehension must, in taking on time and space, take on as well the entire round of synthesis which these, as under imagination, apperception, *and* the categories, have already undergone. With as much as that before us, it is difficult for us to understand what the note is at all there for. The text (not the note) runs thus: "This synthetic unity cannot be any other than that of the synthesis of the complex of a given general perception, in an original self-consciousness, *conform to the categories*," etc. The truth is this. That sentence is completely in independence of, and has no reference to, the note. The preceding sentence in the text, to which there is allusion, runs again thus: "But space and time are not merely conceived to be perceived as *forms* of sensuous perception, but as themselves *definite percep-*

tions (implying a constitutive complex): they are therefore *a priori* perceived with the determination of the unity of this complex in them." To this the reference is added, "see Transc. Æsth.," and the note has no object but to explain that reference. It is confined, then, to a statement of the first synthesis; and it is sufficiently in place that the reference to the categories should, in the next sentence of the text, follow.

There is so much before us at present, whether in text or note, that concerns *Einheit* in regard to space and time, that this seems an excellent opportunity for a review of the whole topic. What imposes this, however, is neither any difficulty in the necessities of the case itself, nor yet in Kant's treatment of it: we simply feel unwillingly involved in no agreeable duty in consequence of the relative ruling of a late very prominent and widely accepted critical expounder. Unity of time and space, indeed, we may, surely, not unfairly characterize as simply the *dominant* of the critical exposition in question. The great issue of the whole machinery of Kant appears to be what is named there a *dating* in time, even an *empirical* dating in time. Almost the one interest is "relation to the unity of time and space as individual wholes;" and nothing seems even possible "except by relating to one all-embracing space and one all-embracing time." A single all-embracingness, that is the word; and to effect as much seems the sole mystery of Kant. What we have named the necessities of the case itself do, indeed, intervene, as it were, to give pause at once. We cannot suppose that Kant's time and space are more, or can do more, than the time and space of the universe. We know, then, that both are receptacles; and we know, further, that both affect their contents, like other receptacles, each only by its peculiar *shape*.

The contents of space are side by side with one another, and the contents of time are after one another; but it is quite impossible to perceive more than that—more than that, that is, as displaying a like nature *with*, but not necessarily as receiving a like nature *from*, the natures proper of time and space. We cannot conceive of space *placing*, or of time *dating*, any one affair of the earth whatever. More than that; we cannot conceive of any one category, or of all the categories together, either placing in space or dating in time. The death of Æschylus occurred at Gela B.C. 456 in a certain manner, on a certain spot, at a certain moment. But let time and space contribute what they may, and let all the categories contribute what they may, we know not that the *determination* of either time, or place, or manner, depended on anything whatever, unless on the legs of the man, the wings of the bird, and the shell of the reptile. Surely the bald head of the poet and its presence there and then were matters wholly of their own; and surely it was neither time nor space, but only the suggestion of a rock, that determined the eagle to drop the tortoise that crushed the skull without the assistance of a single category. We know the very cannon that took the Marquis of Anglesey's leg off; we know the exact spot where, the precise moment when; and we know that all that, and every point and circumstance in all that, have been accurately united into an all-embracing space and an all-embracing time; but we cannot, for the life of us, understand what time and space themselves, or what any category or categories whatever, had to do with the *determination* of all that. Nay, even grant with Kant time and space to be perceptive projections of our own, nor less the categories to be

concentrating perceptive *foci* of our own, it is impossible for us to understand how such appliances were simply more than eyes to see by things which were themselves absolutely independent of, utterly indifferent to, anybody's eyes whatever. Anything more extraordinary, in fact, than this contemplated dating in time, it is not well possible to conceive. The commonplaces that rest upon it, too, issue in such soberly-assured wisdoms! "We cannot represent an object as existing, or an event as occurring, except in space and time" (why not in Padalon or—in Pandemonium)? "Every object *must* exist in a definite part of the one space; and every event *must* occur at a definite moment of the one time," etc., etc., *usque ad* interminableness!

But where can we find any countenance for all this in Kant himself, or in what expressions of his can we surmise it to originate? In the passage before us we are referred to the transcendental æsthetic, as also to a footnote. We shall take the latter first. It is at once intimated in it that space (or time) as an "object," is more than space (or time) as a "form." By *form* is meant the constitutive manifold, the native plurality of units, that, as specific co-existence or succession of parts, is peculiar to, or distinctive of, space (or time); and by *object* is meant that this form, this indefinite many, has undergone synthesis and become, so to speak, a special perceptive entity. As such, evidently, it is a unity, or is characterized by unity. For the requirements of mathematics, it is at once obvious that space, though in itself a mere *a priori* indefinite form, must exhibit itself as a special and peculiar object, in which there is the possibility of demonstrating an even infinite number of characteristic properties. Kant expressly declares all this.

Mere form of perception is one thing, he says, but the formal perception itself is quite another. The former is a simple *Mannigfaltiges* (many, manifold, complex, etc.); but the latter is a unity of cognition in consciousness. The latter, indeed, is brought about only by *Zusammenfassung* (synthesis) of the manifold, according to its form as originally given to sense, and into a one perceptible cognition. This unity, further, was in the *Æsthetic* attributed to sense, and for no other reason than to intimate that it was to be understood as implying a synthesis anterior to that of the categories. Now, however, it is expected of us to be aware that synthesis at all, any synthesis, cannot be a product of sense, but must emanate from the understanding alone. In fact, what unity—mere continuity—is now before us is that of the first crude *imaginative* synthesis (§§ 15 and 24); and without it there could be no *Begriff* of space or time. It is to be said again in passing, however, that that Begriff is, like the Begriff of the "hundred dollars," only a Vorstellung, only what we mean by conception, or idea, when loosely and currently used; it is only a definitely recognised consciousness. It is to understanding, in this its first synthesis, certainly, that we owe the consciousness of time and space as peculiar objects; but still this unity belongs to space and time themselves, and is not that which follows from action of the categories. The (immediate) text is to the same effect as the note; and it is perfectly intelligible how the sentence immediately succeeding the reference should intimate that this synthesis of which there has been question gets presently generalized into the universal synthesis of apperception, "*den Categorien gemäss*," under which all contributions of sense must finally stand. So far we see that Kant must have felt

time and space, as mere indefinite sense-manies, to be insufficient for his purposes: it became plain to him that, for the success of his operations, they must be acknowledged to be definitely recognised in consciousness. But that already presupposed a certain unity of synthesis. This unity, not possibly due to sense, could only be a product of the understanding, in priority, however, to any action of the special categories.

Turning to the *Æsthetic* now, we are disposed to believe that what is referred to is contained, most conspicuously, if not exclusively, in such passages as these: "A great number of *a priori* apodictic and synthetic propositions presents itself from both" time and space (II., 52). "Time and space, accordingly, are two sources of cognition, from which, *a priori*, various synthetic propositions may be derived, as is especially exemplified in pure mathematic with regard to space and the relations of space" (46). "Space is conceived as an infinite magnitude there before us; . . . all the parts of space are at one and the same time together in it *ad infinitum*" (712). "That certain sensations are referred to something out of me, . . . further, that I can perceive them as out of and near each other, . . . to that the perception of space must be already presupposed" (34). "Space is a necessary perception *a priori*, which is presupposed by, and underlies, all external perception" (35). "We can conceive only a single space, and when we speak of spaces, we mean only parts of one and the same sole space. These parts cannot precede, either, the one all-comprehending space as though they were the particulars from which it is generalized; but, on the contrary, they are only thought *in* it. It is essentially one, any plurality of parts or units (consequently, also, the general notion of spaces) rests solely on

limitations of itself" (35, 36). "Different times are only parts of precisely the same time, but the cognition which can be yielded only by a single object is perception; . . . the fact that different times are not at the same time, is inderivable from a general notion; . . . it is directly implied, therefore, in the simple idea of time. . . . That, the parts and every magnitude of which can be conceived as determined only by limitations, cannot be given through notions, but must involve a direct perception" (41).

These passages will excellently illustrate all that has been just declared by the footnote. They (like it), generally, mean no more than that time and space must, for the working of the entire machinery, be conceived to be actually objectively present, as determinate perceptions, to consciousness potentially from the first: they are not to be conceived as mere indifferent, indefinite, scattered, passive, inert forms: they assuredly possess at all times for consciousness—at least potentially—a certain objectivity. It is this, for example, that is evidently concerned, when it is reasoned that the referring of sensations once for all out and apart, involves space, etc. To assume time and space as wholly in affection, indeed, would be to assume them as wholly indefinite. But were they indefinite, they would not answer the purposes in hand. They must be assumed as in some way definite, then; but definiteness is not an action of sense; it can belong to the understanding alone. And it is in this way that it is necessary to assume that time and space already exhibit a certain synthesis (due, of course, to imagination under apperception) even before—nay, for the needs of the exposition, necessarily before, reference to the categories. In fact, just to give consistency and relevance to the phrase that

time and space are "Vorstellungen," and Vorstellungen which "zum Grunde liegen," Kant thinks it necessary to rescue them from the indefiniteness of bare sense into the definiteness—say continuity—of the first crude synthesis.

Time and space, then, require, in some sort, to be definite; but still more do they require to be recognised as perceptions of sense (general sense), and not as notions of the intellect. And it is for that—it is for their perceptivity as against their mere conceptivity—that their "oneness" and "singleness," as well as the nature of their parts to be *in* themselves, and only limitations *of* themselves, are so much and so strongly insisted upon. What Kant means by his unity of time and space, therefore, must now be clear. They are themselves wholly *a priori* and mental; but still they hold of sense, not intellect; they are perceptional, not notional; and, potentially, they are *a posteriori* presentant. Now, for the recognition of them in consciousness a certain unity is required on their part; and that unity is claimed for them: it is the elemental unity of each of them as a perceptive object. Further—and precisely in consequence of that last consideration—it is perceptional unity, a unity such that it has a many of co-existent or successive parts; which parts are only limitations of itself. There is surely nothing in all this of a marvellous peculiarity on the part of time and space, discovered by Kant or given by Kant, by which there is provided for us a new philosophy that explains, or demonstrates, or evinces as necessary, an absolute dating in time and fixing in space! With such things before us, it has its own effect to consider that, after all, and in very truth, and on Kant's own demonstration, *time and space have, of themselves, no unity.* They are but spectral

receptacula for unities of objects, and unities of groups of objects; all of which unities are from elsewhere—all of which unities, in fact, are only thrown on the tissue of time and space, like so much sunshine on the tissue of a mist. Nay, it is not unity at all that time and space as such impose on objects, but rather variety, the variety of the many of units, co-existent or successive, proper and peculiar to the *form* of each. The mist no more receives light into the extension that is peculiar to it, than time and space receive sensation into the extension that is peculiar to them. Whatever talk there may be of unity in their regard, it is not they bestow unity; and to conduct the many of Kant into any unity of theirs as alone ultimate and supreme, is to conduct all into the element of dream.

Just to finish this general subject of the "unity of an all-embracing space and an all-embracing time," it may not be amiss to grasp forward to a certain reappearance of it in connexion with the categories of relation. There, too, a reference is conjured up on the part of Kant to a literal "dating" in time, to a literal determining of facts to "a definite moment of objective time." Now, the following quotations (which have been referred to already) will show what Kant actually means here. "It is seen that the schema of the categories of relation implies and exhibits the relation of the sense-perceptions, the one to the other, at any time (*i.e.*, according to a rule of determination in time)" (128). "The universal proposition of the *analogies of experience* is, All objects of sense stand, as regards their existence, *a priori* under rules of the determination of their relation, the one to the other, in one time" (152). The expressions "at any time," "in one time," "according to a rule of determination in time," are, from these quotations, manifestly

synonymous. The thought in any of them, therefore, is not of an all or whole of a one all-embracing time, but simply of a rule of time-determination applicable to objects relatively in time, as reciprocally together, for example, or causally after one another. What is concerned, then, is merely a universal necessity of relation, and time has no more to do with it than this, that the relation is *in* time, or appears in the succession of time.

Nothing, in short, as regards the whole subject, can be more decisive than the note which is actually before us. There we are distinctly told that time and space have no unity of themselves; but that, in all cases, they must borrow as much from elsewhere. Contrast now with all this the following summary of Kant's *Æsthetic* and of Kant's *Analytic*, of what I call his theory of perception, or of what, with the writer quoted, may be viewed as his (Kant's) theory of "experience" (see *Journal of Spec. Phil.* for April 1879, p. 215 *sq.*).

"Kant's view of experience may be summarized thus. In the *Æsthetic* he shows that inner and outer perception, involving as they do determinations of time and place, are possible only through the pure perception of time and space [That is to say, if there is the particular (time), there is also the general (time), and as much as that, surely! is correct enough; but would any one, at all naturally, suspect it to be made out of Kant's argument that, Things being perceived, not as simply such, not as simply they struck sense, but as, in addition, *out there*, beside and after one another, time and space were, manifestly, already *to the fore!*] For, he argues, a moment in time and a place in space can be represented by us only in relation to other times and other places, and, therefore, in relation to

the unity of time and space as individual wholes [It is not easy to conceive any declaration that should be less in place than this; that argument of Kant (about things being given not *per se*, but *with* time) is to be understood as, Time-moments and space-points being seen only in connexion with other time-moments and space-points, *therefore* there is that unity of an all-embracing space and an all-embracing time, and they (these moments and points) are in it! We see here the actual genetic process to which that strange unity owes birth! We know that such *argutiæ* are their inventor's own; that Kant is quite incompetent to anything bearing the very slightest resemblance to them; that *their* argument is as like to his as a reel in a bottle to a steam-engine. We should also, perhaps, feel somewhat puzzled with the reasoning that, there being time-moments *and* time-moments, space-points *and* space-points, *therefore* there is "the unity of time and space as individual wholes;" but, just opening our eyes to ordinary time and space, we do see that there is really a one space and really a one time, as well as that the one space consists of infinite spaces, and the one time of infinite times. We wonder, nevertheless, if that mysterious philosophy is all there only to *create* that! And still more do we wonder, perhaps, as that "dating" suggests itself again! To date, the writer himself gives us to understand, is to "determine to a definite moment of objective time." That we know to be correct. But a philosophy that shall actually determine things for us "to definite moments of objective time"—that will be chronology, history—that will be to create the universe! Shall we expect that of Kant?] We cannot perceive any object of experience, as here and now present to us, except by relating it to one all-embracing space, and one all-embracing time

[Do I relate that chair to an all-embracing space, and the present quarter to Twelve which I actually now see upon my watch, to an all-embracing time? Would it be impossible for me to see either the one or the other unless I did so? Not but that, really now, that chair has actually its own place in the one infinite space, and this quarter to Twelve its own moment in the one infinite time—so, too, that no power whatever could take *where* from the one, or *when* from the other! Surely it must be an enormous philosophy that has the *deduction* of all that!] The particular is known through the universal, and as determined by it [This shows that we were right in our characterization of the first sentence; but it would have been quite as apposite to have said here, the fire burns or the rain wets.] In the *Analytic* Kant takes another step [And are we to understand we have now seen Kant's step in the Æsthetic? Surely, like Hegel, he must have drawn his seven-league boots on!]; for there he seeks to show that no one thing or event can be known as objectively existing or occurring, except in so far as it is definitely related by means of the categories to other things and events, and, therefore, to the unity of experience as one all-embracing whole [This is the same determination to moments and places in that marvellous unity, which we only see above, and which we are to understand is the achievement of philosophy in the hands of Kant. There is only *added now* a reference to the categories. Of course, we still readily admit that "no one thing or event can be known as objectively existing or occurring, except in so far as it is definitely related to other things and events, and, consequently, to experience as a whole;" but we only ask, did we want a ghost from the grave to tell us that, or is it possible

to believe that Kant *could* "seek to show" such—puerilities? That shall be philosophy—nay, that shall be the philosophy of the Colossus Kant!] This objective determination and reference to the systematic unity of experience are, for Kant, one and the same thing [That is true when the phrase "systematic unity of experience" is correctly understood; but when it is supposed to mean "the systematic unity of experience," as we actually have experience in empirical chronology and empirical geography, then it means—a nightmare; which it were impossible to impute even to the "gemeinsten Menschenverstand, wenn er nicht ganz thierisch ist," and which "bis auf die neuesten Zeiten in der Philosophie unerhört ist."] In working out this last thesis, however, Kant finds himself obliged to prove that the former determination of things, which was demonstrated in the *Æsthetic*, is not possible except through the latter, which is discussed in the *Analytic; i.e.*, that we cannot know things as in time and space without determining them by the categories in relation to the unity of experience. In other words, while we cannot represent an object as existing, or an event as occurring, except in space and time, we cannot determine either to a definite place or time, except through the categories, and especially through the analogies of experience."

There are three sentences that follow, but they are absolutely to the same effect; and even in the above it is to be understood—not that it makes any difference—that there is a more decided trafficking with categories now, than preceded conviction of the blunder that causality alone was the minister of objectivity. Everywhere we see the one ever-present delusion that *relative* position means a thing's precise date in time and place in space, and that the principles

of general experience must be regarded as determinative of the individual facts of the empirical world whether as in time or space. It is easy for any one to see how far our ordinary time and space are operative as concerns the production of actual events and facts, and to know that, while the time and space of Kant cannot, in that respect, do more than the ordinary ones, they will never be able to explain either the *why* or the *what* of them (or of themselves). As little as there is, in the real time and the real space (as such), a power to determine what empirically is or happens, just as little is there any such power in the spectra of Kant. These spectra, rather, are declared by Kant himself to be in themselves only analytic (disjunct) manies of indefinite affection—just so much unconnected loose mist before the eyes; and, so far as any synthetic (conjunct) unity is concerned, they are further declared merely passively to take it on, *as* imposed upon them, and *when* imposed upon them, from a region utterly alien and diverse (see also under *Schematism*, Chapter I.)

What follows under the first asterisks is a couple of illustrations, which, duly studied and understood, are calculated to throw a very decisive light on the general purposes and proceedings of Kant. The first thing I would allude to, is the acknowledgment that the category of quantity amounts to "precisely the same synthetic unity" as "the synthetic unity of the complex in space." Quantity, then, expressly *a priori given*, at once in an object of sense and a notion of intellect, would seem to involve a very unnecessary duplication. Had space been *a posteriori*, Kant would have had no difficulty in recognising the notion of quantity as merely derivative. He might have seen that the fact of sense being *a priori*, in no

wise altered the case. An object of sense, whether given in one way or the other, must surely be regarded as *given*, and if given, it is there for the understanding to form a notion of it. We cannot make any similar remarks in regard to the second illustration, however, though it is quite certain that Kant would have us regard time and causality here, as precisely on the same line with space and quantity there. Space actually *was* quantity, in bodily form, quantity; but time is not causality, not as in bodily form causality. Necessary synthetic unity of a cantle of space is at once quantity, quantity in express and direct form. But necessary synthetic unity of a cantle of time is not causality. We cannot apply to *time* any unity that will not just take in so much succession, as an hour, or half an hour, a day, a month, etc., but that is still only quantity—quantity, though in another element. No unity of time as time, and no unity of the succession of time (the manifold) as the succession of time, will ever yield a type of causality, the type of one thing *out* of another. Nor is the state of the case in the slightest different, should we regard, not time, but the filling of time. Filling of time, to be possibly called *a priori*, can only be the *generale* of the bare faculty or function, sensation; and that, to Kant himself, can, on the question of unity, only yield degrees. Of course, it may be asserted that the filling of time means more than a generalization of sensation in its mere form as from something to nothing or *vice versa*—it may be asserted that the filling of time means actually the things in time. Well, suppose it does, the case is not altered. Unity of things in time is, simply as such unity, a quantitative collection—precisely such collection as we called a synthetic unity of a cantle in space. In

fact, no unity can be granted as *a priori* permissible for space or time, that is not, either as extense or intense, a simple quantity. That is, even grant (the extreme case) the possibility of an *in and in* of something in time that is in time only and shows not a vestige of space, the result would be, not unity of causality, but unity of intension. No *a priori* type, even in the most distant shadow, is to be found for causality anywhere. The only possible type of causality is the *empirical* generalization, at any time that the *reale* A is, the reale B always ensues. This, we may, with Kant, if we will, call a *schema*, and expect to pass as *a priori;* but it is, for all that, simply empirical, and at once a taking for granted of the entire case. And this is a consideration which sists the whole business, and we have only ruins around us.

The analogy, then, which Kant intimates here, does not exist. If I am to picture the one object (the house) as conform to the complex of the one perception (space), I must picture the other object (freezing water) as conform to the other perception (time); and as quantity is the notion that is analogous there, causality must be the notion that is similarly analogous here. But this is not so. Laid into space, the units of the house are precisely as the units of space—*simply* side by side. But laid into time, the units of liquid then and solid now are not precisely as the units of time—*simply* after one another. After one another they are, of course; but they are not *simply* after one another; they are not after one another in the same way as the units of time are after one another. They are not only *after* one another, but actually *through* one another. The ticks of one's watch are after one another, simply after one another; but it is quite different with shadows after clouds or

full shoots after rain: these are after, indeed, but they are not in the same way after; they are not *simply* after: they are not only after but *through*. In order to complete the analogy, the units of the house ought to add to their mere *side by side*, as in space, the relation as well of *through*. As that water and this ice are not only the one after the other, like the units of time, but also the one through the other; so likewise that stone and this stone, in the house, should not only be side by side like the units of space, but also the one through the other.

But if, as the one object is conform to the one element, the other object is not conform to the other element, neither is the one category analogous here, as the other category was analogous there. This, however, has been already sufficiently suggested, and we shall not dilate upon it. It will suffice to say this. The category quantity is precisely the same thing ideally and intellectually that space is objectively and sensuously. Kant himself expressly asserts this; he expressly exhibits space as objectively pure quantity (126, 142, 754). But it is impossible to entertain the conception for a single moment that causality is precisely the same thing ideally and intellectually that time is objectively and sensuously. It is quite impossible to say that, "leaving out of view the form of time, precisely the same synthetic unity is to be found in the understanding as category of causality." And it is equally impossible to say for causality and time, as is said for quantity and space, "It is one and the same mental spontaneity which, there as imagination, and here as understanding, effects synthesis in the complex that may be before perception." But it is that Kant would wish us to understand.

We may advantageously set this in yet another

light. The supposition is that causality in relation to time is parallel with quantity in relation to space. Well, now, we saw, in the one case, that, if space as object was quite on terms of identity with quantity as notion, there was no use whatever of postulating an *a priori* place and quality for both. The object being given, it was inevitable that the notion of it would follow. The parallel holding good, then, a like superfluity ought to appear in the one case as in the other. That is, causality as notion being identical with time as object, it is unnecessary to make an *a priori* postulate of what can so self-evidently be an *a posteriori* inference. But is this possible? Surely it is inconceivable that time as time would ever yield to any process or processes of thought whatever, the notion of causality. May we not take it for granted now, indeed, that, if quantity can very readily find its own image in space as space, it has been convincingly proved that it is utterly impossible for causality to find any such image of itself in time as time. The conclusion is, that there *may* be the category; but there *must* be the "empirical instruction."

After the second asterisks, there follow other explanations which would evince how it is that categories can act in regard of experience in the way Kant would have us accept. And here he at once makes use of pure perception as the stepping-stone. It is easy to see, he seems to say, how the forms of general sense dictate to those of special sense; but, in reality, that categories should be alleged also to act in the same way, is not a whit more difficult. Of course, the reason is that the objects of perception, being merely affections within ourselves, are quite as well situated to take on one set of internal forms as another. It is then shown that both sets of internal

forms meet in imagination, introduced into which element, consequently, special sense must find itself in subjection to the combined action of both. We are warned, however, that this action is only synthesis; and may, accordingly, understand that it is still to the senses we must be indebted for all that *substantially* constitutes history, life, experience. Abraham built an altar, and bound Isaac, and laid him on the altar upon the wood, and stretched forth his hand, and took the knife to slay his son; but the angel of the Lord called unto him; and he lifted up his eyes, and looked, and, behold, behind him a ram caught in a thicket by the horns: there is a good deal here, but one would like to see the very dot in it that is owing to a category. Alexander speared Clitus in a certain spot at a certain time: it would have been a happy thing for the conscience of the king, had it been only a category that willed the event. It is, no doubt, true that Bruce struck down de Boune at a very definite moment of time and in a very definite point of space; but it is hard to see what the categories had to do with "determining" to either point or moment. If words are at all to be held responsible for the meaning they unmistakably convey, then the actual dating and the actual placing which are attributed to the categories must be allowed not unrighteously to exercise our minds with hesitation, perplexity, and surprise. In the section before us, Kant himself, notwithstanding all that he would like to claim for his transcendental machinery, evidently feels bound to hint as much.

§ 27. Result.

We see the transcendental principles both of sense

and understanding; and we see also that they are only for empirical use. The alternative is suggestive, —that either experience makes notions, or notions experience, possible. For, evidently, if all our notions depend upon experience, they must only be contingent, and such a thing as a necessary notion is impossible. But we *have* necessary notions. To ascribe an empirical origin to such, then, would be a *generatio æquivoca.* The second alternative, that notions shall be present with us, independent of experience, and in prescription of experience, will amount to an *epigenesis* of pure reason; that is, an epigenesis of *a priori* necessity on *a posteriori* contingency will be determined from within us through certain pure principles of sense on the one hand and understanding on the other. Were such things due to an arbitrary *pre-formation*, they would be only subjective and unpossessed of the necessity and objectivity of intellect. After all, however, Kant himself is not quite free from this position which he rejects. If Kant cannot exactly say, "I am so made that I cannot otherwise think these facts than as so and so connected," he must admit that he is so made that he cannot but infuse into the contingency of his senses a necessity that exists only elsewhere. It is really doubtful, then, if, even on Kant's position, we are safe against the sceptic denying this and that for *his* subjectivity, and objecting to the fact of any necessary judgments. On that position we are really still under the power of peculiarity of subjective construction; and on that position, we can still object to judgments in empirical matter, the validity of which is but a validity borrowed.

The Brief Idea names again all the transcendental factors. We see, first, special sense-multiples; second,

general sense-multiples; third, categorical multiples (which are still unities); and, fourth, the unity of apperception. On the whole, one is tempted to say that he who does not understand all this now, ought to look rather curiously at his own self. It ought to be seen, too, that the entire machinery is absolutely within; that there is no provision in Kant for more than a false show of externality; and that no one object we know as outer or inner *is*, but only *seems*.

I may further remark that the division by §§, now to be abandoned, has been for the purpose of making prominent the successive steps of the deduction. From what is said, too, it is to be expected that much light will be extended to us from the *practical* part of the deduction, the demonstration of the transcendental machinery in actual use, which, under the title *judgment*, follows. This portion of the work, though objected to by some, is, in reality, perhaps, the most indispensable of all. The *pieces* can never be supposed good, until they have been shown together and in place in actual experience. This practical part falls under judgment, for it is the function of judgment to subsume the particular under the general; that is, to do what we mean by *apply*. The subject, then, of pure sense and pure understanding, we must conceive to have fallen under *simple apprehension;* for pure objects and pure notions come naturally under *terms*. If Kant had quite consciously done this, he might have struck on some little improvements; and, seeing that he is going to follow up the propositions of judgment by the syllogisms of *reason* (in the ideas), it is not quite intelligible how the conception of terms and simple apprehension escaped him. It is to be said at the same time that, in these collocations of Kant and his successors, we may quite as often

suspect a vacant ingenuity, as recognise a filled ratiocination.

The Deduction in its First Form.

If we cast a glance on the first edition of the *K. of Pure Reason*, we shall find the deduction there to differ from the foregoing at least in length. But there is more than that, perhaps. It is quite possible, namely, that what is shorter may be also clearer. At all events, he who has assimilated the longer statement will find himself very much to gain in the assurance of conviction by a perusal of the shorter. It may be well, then, that, in conclusion here, we should add a remark or two as in connexion with such perusal.

The basis of Kant comes out very specially clear here. That is what Reid calls the ideal theory. According to that theory we never get beyond our own interiors in regard to anything perceived. Anything in sense, sound, smell, colour, or whatever else, is only an affection of our own, a state of our own, a modification of our own selves. But such supposition, evidently, involves at once the further assumption that the world of experience, this externality which we fancy ourselves to perceive, is only a consequence of a manipulation within, of our affections within. As much as this is said again and again by Kant here, as, "Objects as such are not outside of ourselves, but exist only in our sensibility. . . . Objects are not things in themselves, but what we call *Erscheinungen*, and any such are only competent to an object which is within us; for, evidently, any modification of our own sense, is not possibly out of us; . . . all objects, to which we can possibly turn, are bodily in me; that is, they are

modifications of my own identical self. . . . Therefore the manner in which such affections are united into consciousness, must lie in consciousness itself; that is, an intellectual form must precede any actual cognition of such objects" (113–115). It is easy to understand, then, how Kant follows up reception into sense, by the apprehension of imagination, and that, again, by a concentrating union into the pure ego itself. These are the subjective transcendental conditions of all experience.

But this, probably, will be the fitting place for notice of the contending opinions here. The occasion of these is this. There can be no doubt that the accusation, in a certain Review, of Berkeleian idealism, blind and unjust as it was to Kant's own, not only vexed this latter, but startled him into the necessity of correction. The critical idealism was certainly a system of its own, and it would be to miss all, to confound it with what was known as subjective or ordinary idealism. Hence, undoubtedly, the changes which Kant brought forward in his second edition. Now, then, the question is, What do these changes amount to? Schopenhauer believes Kant to have been only a renegade to his first subjective idealism, and to have thereby simply stultified himself. Ueberweg, on the contrary, holds Kant to have altered words, but never opinions; and that is Kant's own asseveration. Schopenhauer is a very small authority here, and his view errs very much by excess. In no case can Kant be said to have exactly stultified himself. He might have expressed himself in the first edition as not unfriendly to ordinary idealism; but it was neither to stultify himself nor recant, that, in his second edition, he altered too friendly or equivocal phrases of the first, and formally added an

express rejection of all idealism but his own. It does not follow, however, that the contention of Ueberweg is the right one. In that reference, it is quite allowable to contrast Kant's first expressions with his second ones, and to point out how really friendly the former are to the idealism which the latter expressly deny. But further, as I demonstrated to Ueberweg, in an epistolary correspondence which I held with him several years ago, Kant has *not*, as is generally supposed, altered in the second edition all his questionably idealistic expressions in the first; *inadvertently*, as I believe, there are still left standing one or two that are, in their effect, singularly betraying. In what of the first edition we have now before us, there occurs a passage which may be said sufficiently to represent the assumed idealistic expressions of that edition: "Our perceptions may proceed from what sources they may, whether they are brought about by the influence of external things, or through internal causes" (93). Of passages, again, inadvertently left unaltered in the second, the following may suffice as a satisfactorily striking example. It occurs in the second paragraph that precedes the asterisks towards the end of "Remark to the Amphiboly of the Notions of Reflection." "Understanding, accordingly, limits sense, in that it warns sense not to presume that it (sense) reaches things in themselves, but solely *Erscheinungen*. Understanding, however, does not thereby extend its own field; nor, even though it postulates a thing in itself, is that thing more than a transcendental object, which is the cause of the Erscheinung (not, consequently, itself Erscheinung), and not possibly to be thought as quantity or quality, or substance, etc. (for these categories require always sensible forms in which they determine an object).

Of such transcendental object, then, consequently, it is quite unknown, whether it is inside of us or outside of us, whether it would disappear if sense disappeared, or, even then, remain." When one considers such words as these, one must admit that to grant the possibility of the originating cause or causes of our external affections being within, is not indirectly or ambiguously to favour subjective idealism; while expressly to deny such idealism, and yet leave such expressions standing, is, surely, to commit an inadvertence. Another very glaring contradiction I may point out in the last sentence quoted. I have already said that the transcendental object, as utterly unknown, may be called transcendent. Nevertheless it may be called transcendental, because it is an assumed factor in experience, even as the ideas are, nay, more than the ideas are, for while these remain ideas, it, even in name, is an assumed object. But, that apart —we see it asserted that the transcendental object cannot possibly "be thought as quantity, or quality, or substance, etc. (for these categories require always sensible forms in which they determine an object)." That is, the transcendental object cannot be characterized by any category; and yet at that very moment it is actually characterized by the category *cause!* It is not Erscheinung, but yet it is "the cause of the Erscheinung." As one sees, the contradiction is doubly glaring here. The category of categories is asserted of the transcendental object at the same instant that all categories are expressly excluded from it; and while categories are regarded as applicable only to Erscheinungen, a category is applied to the transcendental object at the very moment that it is directly denied to be an Erscheinung at all. In illustration of the contradiction of the second edition to

the first, we may complement the extracts that bear on the latter, with one from the nominally express "Refutation of Idealism," which constitutes, in this reference, the remarkable feature of the former. Kant talks of more justly retaliating the "Spiel welches der Idealism trieb;" and it is just possible that his refutation is a mere Spiel. For it is certain that Kant had quite as good a right to practise the well-known *double entendre* as Berkeley himself. "Even our inner experience is only possible under presupposition of external experience;" it "proves the existence of objects in space without me." These seem clear expressions; but still Kant may mean them to refer only to his own peculiar external Erscheinungen. The whole course of the Refutation, however, seems to refer to actual transcendental things as external; and we have seen, twice over, the possibility of the transcendental object being within us, directly asserted. Now, however, in this Refutation that such cause may be within us, is a doctrine expressly attributed to the idealists, and denied for himself. In his second preface, too, he avers that, "however innocuous (which in point of fact it is not), as respects the essential ends of metaphysic, Idealism may be, it remains a perpetual scandal for philosophy to be obliged to leave only for faith the existence of things without us (to which things we owe the entire material of our perceptions)." He did, then, at that time, accentuate the probable existence of causes really external in explanation of the affections we call external. Not but that he had previously *loosely* granted that these causes *might* be internal. The Review in question had been really a serious shock to him. It was necessary to checkmate a very misleading and mischievous, but gratuitous mistake.

Now, however, I doubt not, notwithstanding what countenance his principles of Taste seem to lend, but not by any means necessarily, to an externality proper, that, were Kant alive, he would find it quite consistent to return to his first, quite inessential, admission, let the transcendental object be without *or* within. His *critical idealism*, *so far as he is concerned*, remains essentially the same under either supposition. And, with all this, we should not hesitate to appeal, quite as much as Ueberweg, to Kant as a man distinguished "*incorrupta veritate.*"

But let us return to the text immediately before us. The great interest here is the triple synthesis: 1, The synopsis of the perceptive units furnished by the sense-affection; 2, The synthesis of these units in imagination; 3, The recognition of the various syntheses into unities of objects in the unity of apperception. These three factors in an act of perception would be more distinctively realized, perhaps, should I give them the titles now by which I named them to myself more than twenty years ago. I described them respectively then, as 1, The Diathesis or Disposition of Sense; 2, The Synthesis or Composition of Imagination; and, 3, The Metathesis or Transposition of Understanding, under the Henosis or Union of Apperception. Generally the whole process was regarded as one of Synopsis or Apprehension, followed by another of Synthesis or Reproduction which ended in the communing and commuting of any manifold concerned into the Recognition or Henosis of Apperception.

The text of the first edition, however brief, is not to be regarded as by any means clearly and unambiguously written. By "*affinity* of complex" is probably meant the ruled and regulated result of the

various processes, but that is not certain. One is inclined to think, also, that what is meant by "Association" is the mere work of imagination, but again it seems (109) to point to some rule proper to the sense-units themselves "whereby one rather than another enters into combination with a third in imagination." One has to think to himself here, even, that Kant does not often admit, especially for synthesis, any empirical condition, though such conditions, evidently, must be, in order that the *a posteriori* matter may be found to fit this, that, or the other *a priori* form. Without detailing them, I may say that expressions occur more or less welcome in explanation of various terms, as, dependence of perception on connexion (92), Anschauung and its Manifold (93), Meaning of Begriff (97), what an *object* is (97–101), Apperception Transcendental and Empirical (99), Synthesis of Begriffe (102), what Nature is (104), Understanding (108), Erscheinung and Wahrnehmung (105, 108), Apprehension (109), what Hegel calls "ungeheuere Aposteriorität" (114), etc., etc. "Understanding is always busy spying through the empirical impressions in order to find a rule in them." That is a sentence (113) which would seem to grant rule to empirical matter in itself.

Book II.—The Analytic of Judgments.

What, in general, we have to see here, has been already intimated, the subsumption, namely, of the pure manies of sense (*a priori* perception) under the pure unities of understanding, with the consequent

production of certain pure, or non-empirical, or *a priori* and transcendental, propositions.

We see at once that Kant has had in mind the simple apprehension, quite as well as the judgment and reason, of school logic. We suggest, however, that, had he used precisely that title instead of understanding, he would have gained in simplicity; for he might have included under it the Æsthetic as well.[1]

There is nothing in the Introduction that calls for separate remark. We can understand, and admit for the nonce, that Judgment is only a faculty of discernment, which, in regard of given rules, looks out for cases. As concerns the *Secunda Petri*, called also *Altera pars Petri*, the allusion is to the second division, Judgment, of the logic of Petrus Ramus. There are those, however, who derive it from the epitaph on Ramus: Hic jacet Petrus Ramus, vir magnæ memoriæ, expectans judicium. Of course, *judicium* here may be referred to the faculty of that name, and poor Peter inferred, consequently, to have wanted it, inasmuch as he was still expecting it. The remarks here, whether special or general, are so very plain that comment is superfluous. On the whole, we have to understand that what we have seen hitherto was the *collection* of the various necessary *pieces;* and what we have to see now is the *application* of these pieces into a single act of perception, and then, collectively, into all those acts of the same faculty or function which constitute *experience;* said experience itself being this all of things and events which is given us to live in.

Chapter I.—The Schematism of the Categories.

We are told at once that the instrument of the schematism is a *tertium quid*, holding on one side of sense, and on the other of intellect; and it is evident that any such double-sided principle, being pure, non-empirical, *a priori*, will also be transcendental. It is quite certain, then, that Kant, in the first instance, looked, for this *tertium quid*, wholly to time: the categories should find, in peculiarities of the perceptive manifold of time, actual sensible (perceptible) schemata of their own intellectual selves. It is this the student has to watch. In point of fact, is there in time a correspondent sense-many for each intellectual many implied in the respective unities of the various categories? Of course, such schemata being, they will be, as said, manifestly transcendental, and that term is by no means arbitrary. As schemed, the general idea is eminently simple and intelligible. We see, too, that what is to result—the entire provision of *a priori* forms (pure intellect on the one hand, pure sense on the other, and, in schemata between both, the pure communion of both)—will be what we find so often referred to as the conditions of possible experience. It is to be understood, at the same time, that the possible experience meant is not *any* possible experience, but only that single experience which is alone possible to *us*—as creatures limited to intellects which can realize themselves only on and through the internal affections of what are called senses. Kant himself directly says this here. The categories, he affirms, have no bearing on an absolute experience that takes note of things in themselves: they have no meaning whatever for us when unrestricted to the conditions of our sensibility.

And they are so "restricted." Each category, though only for use in experience, is, in the first instance, "restricted" to its own peculiar schema.

The sixth paragraph here may be regarded as an excellent summary of the *Deduction;* while the definition and illustration of schematism which follow are particularly interesting and striking. The schema is, so to speak, no picture-image; it may be called rather a notion-image—even as the conception of a triangle is a notion-image. The idea of a triangle, namely, must be wholly general; it can neither be scalene, equilateral, nor isosceles, and yet it must be all. The schemata, then, are to be such notion-images; and the schematism itself, as a whole, is "eine verborgene Kunst in den Tiefen der menschlichen Seele—a hidden art in the deeps of the human soul." For full understanding, let the reader fancy a triangle as *figura* of a *schema.* In a word, the notion is to be conceived reflected into a schema through the *a priori* sense-forms. Kant immediately, however, proceeds, as usual when we expect a *rationale* of origin, just to *set down* the schemata. He does this, he says, "not to stop now for a long and tedious analysis." This manner of Kant's always gives a jolt; but such jolt will be found, in some cases, to have become a shock, and a shock followed by an absolute halt. Kant himself, for example, declares (III., 6) Hume to have summoned reason to produce her right to assert "something such that, it being, something else thereby necessarily follows;" and yet what this same Kant simply *sets down* as the schema of causality is, "something such that, it being, something else always follows." What is interrogative in Hume, is only affirmative in Kant! What Hume hands to Kant as the problem to solve, Kant simply hands

back to Hume as the solution to accept! The same thing is glaringly the case with reciprocity, etc.

By-and-by we have the phrase that the schema of relation refers "to the connexions of the sense-units in each other's regard at any time." What is translated here "at any time" is the expression "zu aller Zeit;" and the translation may be possibly cavilled at—especially by those who have the craze to see no object on the part of Kant but to bring everything together to be determined into the unity of time itself—into "alle" Zeit or "eine" Zeit. We actually have (II., 152) the expression: "The general principle of the analogies of experience is, all objects of sense, as concerns their existence, stand *a priori* under rules of the determination of their relation mutually in one time (in einer Zeit)." Now there is no question here but that the one phrase is perfectly equal to the other: each is put forward as an exact and formal definition of what refers to the principles of relation. It becomes, then, necessary to determine how the two phrases, "zu aller Zeit" and "in einer Zeit," can be possibly held to mean the same thing, and what that exactly is. Well, suppose we assume, in the first place, what the expounders alluded to evidently believe. In that case, in the one phrase it is to be supposed that what is concerned is a determining in *all time*, as in *one time* in the other. Now, what may that itself mean? What *is* to determine in all time? What *is* to determine in one time? This pen is an object, and the trickling of ink from that overturned bottle is an event. There cannot be a doubt that the one, simply as being an object, and the other, simply as being an event—that they are both determined in "one" time and in "all" time. And we shall take it for granted that the relative general conditions in

their case will be the same in that of all others, whether events or objects. How, then, is it true that this pen and that trickling of ink are determined in all time? Why, we see that this must be so, simply from the conditions of time itself. The pen was looked at exactly at half-past 12 on such and such a day of such and such a year, and the spilling of the ink took place precisely one minute later. The pen and the ink, then, are so related in all time. There is no power on earth—there is no power in heaven—that can alter that, even to a hair's breadth. As pen and ink were at such and such a moment, so at that moment they are determined in all time. Any one fact whatever, whether object or event, is at every instant of its existence photographed, to say so, in all time. But if it is easy to see this, as in the case of "all" time, it is equally easy to see the same thing as in reference to "one" time. For there is but *one* time. Time cannot be taken, so to speak, at any time, but as a whole. There is but a single chronology. And, in that chronology, there is no one thing or event whatever but has its own proper, special, and peculiar, its own absolutely individual, its own absolutely inalienable right. All is a becoming, and each and every unit of that becoming can only exist when and where it *is*. One may say—as we have said—that that is because of the very nature of time; but one cannot say that that is because of the very nature of time, more than that it is because of the very nature of existence as existence. That, however, wholly apart, one cannot say that that is any more because of Kant's time than because of time vulgar. Or, what is simply to the point here, one cannot say that Kant's time explains that. Kant's time has not, in a single iota, more power than what we have just called time vulgar.

Kant's time is, in short, accurately time vulgar, and accurately nothing but time vulgar. For time is in every respect identical, and self-identical, whether as given to the subject (to us) from the subject's own interior, or from the subject's own exterior. Kant says that it is given from our own interior: we say it is given from our own exterior. But exterior, interior, *homoiousia*, *homoousia*, it is perfectly the same thing in both. And it is absurd to suppose that Kant makes any other claim. Kant knows no other "one" of time but the one *we* know. Kant knows no other "all" of time but the all *we* know. And the darkness involved in any other supposition is simply Cimmerian. Fancy such grave propositions as, "We cannot represent an object as existing, or an event as occurring, except in space and time" (where else, in the name of common-sense, *could* we do so, or is it Kant's philosophy that *does* do so?); "every object *must* exist in a definite part of the one space, and every event *must* occur at a definite moment of the one time," etc. What are we to conceive of the ratiocination concerned, that could so occupy itself? Does Kant's philosophy—does any philosophy do that?

But if that is the state of the case as regards the unity of time and space conceived as in and of themselves, is there any difference, in that respect, to be attributed to the categories? What has either quantity or quality, what has either relation or modality got to do with the determination of anything whatever in time chronologically or in space geographically? This my pen, that trickling of ink from the overturned bottle, what has any category of mine, or yours, or anybody else's, got to do with the determination of either? Why, nothing. It is not even relevant to speak of that; but suppose it is categories

that enable *me* to determine that, it is not *that* which, even in that case, *they* determine. Even in that case, they do no more than Cheselden's knife did to the blind man; they enable *me* to *see*. *What* I see, however, is absolutely independent of my seeing or any seeing. *What* I see comes neither from time nor space, and much less from any category. What I see, in fact, dictates to space, dictates to time, dictates to the categories, and is not dictated to, whether by all or either. And this, as said, is the teaching of Kant.

Time is a "one," then, and time is an "all;" but, neither in our time nor in Kant's time, for all that, is there any mysterious necessity of a mysterious "all-embracingness," which only the most mysterious of all philosophies, the philosophy of Kant, shall have mysteriously discovered and more mysteriously demonstrated.

But, if we dismiss time and space, if—at least for any action on time and space—we dismiss the categories themselves here, there can, plainly, be nothing left us but what are called things. It will be on things that that unity, that allness, is accomplished, and not on time or space. The categories may have, indeed, an *application* there. But it is on relations that we are employed, and there can be no question in that regard of any unity or of any allness that is not *relatively* such. The unity of which Kant speaks shall simply be a unity of things relatively the one to the other; and so, similarly, of any such allness. And nothing more nor less than this is demonstrated by the text.

It was with the phrase "the connexions of the sense-units in each other's regard at any time" we began here, and specially with the translation "at any time" for "zu aller Zeit." Now, if we will look at the text, we shall find that this phrase is followed

by a parenthetic clause which is there for no other purpose than to explain it. The clause runs thus, "that is, as in accordance with a rule of the determination in time." "Connexions of the sense-units in each other's regard zu aller Zeit" means, consequently, no more than that these units are, by a rule, related to each other in time. If A B be causal, then B is so related to A by a rule in time, that whenever A is, B necessarily follows. Or if A B be reciprocal, then B is so related to A that it is one with it in a relation of action and re-action. We see the nature of the rule meant, and we see the nature of the determination meant. Neither the one nor the other is to be taken up as a mysterious prong that is mysteriously to spit things and events into a mysterious fixed unity of a one all-embracing time. When I observe the ink trickling from the inverted bottle, or when I see that the pen, paper, desk, table, floor, room, are all together, then I perceive also certain unities of relation, which unities are, of course, like all other things, in time, and in the succession of time, but which, for all that, may be said to be quite independent of time, and to have nothing to do with time.

But we have seen that the quotation from II., 152, had the same reference as that from II., 128. The phrase "rules of determination of relation in each other's regard in einer Zeit" is to be held as completely parallel with the preceding phrase "connexions in each other's regard zu aller Zeit." "In einer Zeit," in fact, must be held to be in some way tantamount to "zu aller Zeit," and to be equally susceptible of the parenthetic gloss that declares no more to be meant than a rule of relation between things. We may add, of course, *in time*, but *cela va sans dire*, and we have gained nothing by the addition. And this is Kant's

own understanding. So little does Kant himself make of the mention of time in the statement, that he is actually found in his second edition expressly to eliminate it. The words of the first edition, "The general principle of these is, All presentations to sense, as regards their existence, stand *a priori* under rules of the determination of their relation the one to the other in einer Zeit," are found in the second edition to run thus: "The principle of these is, Experience is only possible through the perception of a necessary connexion in the presentations to sense." In this regard, indeed, Kant not only saw, probably, that the reference to time was unnecessary; but he must have seen that the addition "in einer Zeit" was only calculated to obstruct and mislead. The heading was quite general, for example, and bore to apply to all relations; but it was only the factors of a reciprocity that were literally and accurately "in einer Zeit." They were all together, and at once, and in the same time. To be sure, the causal tie was so close, and intimate, and instantaneous, that there likewise the relative factors might, with perfect truth, be said to be "in einer Zeit," or in one and the same time; but still, *potentially* at least, the effect was always *after* (that is, *not* at the same time as) the cause. It was, probably, some such considerations as these, then, that led Kant to the withdrawal of "in einer Zeit;" but if the one phrase is capable of being withdrawn, so also is the other. That undoubtedly is so; but "zu aller Zeit" in the one case, and "in einer Zeit" in the other, were really added in order to convey the *universality* of the relation. This is demonstrated by the fact that when "in einer Zeit" was eliminated it was replaced by "*nothwendig*." But, on that understanding, what Kant meant by

"zu aller Zeit" must have been simply "*always*." In point of fact, the "*zu* aller Zeit" is not *in* aller Zeit, and can mean nothing but, as it is translated, "at any time." The relation of causality, for example, is such, that it holds good "at any time." Or, as it may be otherwise said, "at any time" that the cause is given, the effect follows. That is just the meaning of *aller*, every and any. From all this, it is evident that it was no wonder "in einer Zeit" was withdrawn; for it is adequate, after all, only to a very dubious and unsatisfactory sense. "All presentations to sense, so far as their existence is concerned, stand *a priori* under rules of the determination of their relation the one to the other in one time." As said, one *might* get a meaning out of this—by reference to reciprocity especially. The elimination of the phrase, however, leaves the question of no importance. But, be all that as it may, I am positively very much inclined to suspect that what Kant meant to write, or perhaps wrote and forgot, was not "in einer Zeit," but "in *irgend* einer Zeit;" which, naturally, is but another reading for "zu aller Zeit." And for "zu aller Zeit," with what holds of it, as much as this may, by way of discussion, suffice. I will only add that we might illustratively refer here to the phrase "zu jeder Zeit" which, to the same effect, is used elsewhere. On II., 153, there occur in the first paragraph the words: "drei Regeln aller Zeitverhältnisse der Erscheinungen, wonach jeder ihr Daseyn in Ansehung der Einheit aller Zeit bestimmt werden kann;" and we English them thus: "three rules of all the time-relations of objects, according to which rules there can be determined for each object its relative existence in regard of the unity of all time." For reasons given "Daseyn" is correctly enough translated "re-

lative existence," which tends to lessen the difficulty. Still "existence in regard of the unity of all time" is a phrase that seems to imply that every object has its existence expressly determined for it in the unity of all time, and this, too, by the three analogies. We know perfectly well from the state of the case that this is impossible; and we know from scores of sentences, and the whole drift of his theory, that Kant actually proclaims this to be impossible. Accordingly I feel myself free to give this translation: "These laws will determine for every object its relative existential place in regard of unity (connexion) always or at any time." And this is confirmed by the "jeder" alluded to, which occurs in the very next sentence: "The general principle of all three analogies depends on the necessary *unity* of apperception as regards every possible empirical consciousness (perception) *at any and every time* (*zu jeder Zeit*), and, consequently, said unity being *a priori* implied, on the synthetic unity (connexion) of all objects in respect of their relation in time." The expression is certainly awkward at times, but all these *allers*, *einers*, *and jeders* being diligently compared, as well as the respective contexts, no one can have a moment's doubt that Kant has "relative existence in time" only quite generally in his eye; that he means no "*definite*" time for any effect whatever, but only the time generally of an effect relatively to its cause—namely, that it is *posterior*.

What follows in this chapter is so clear as not to demand any commentary. Only, the reader must familiarize himself with the idea that the categories are hardly of any use proper but as unities of consolidation to manies of sense (sense of some kind—any kind). It is a large moiety of the lesson of Kant to say, Oh, use the categories, not as to the Erschein-

ungen of sense, but as to things in themselves, if you will, but accept then the result—something in regard to the *existence* of which you can say nothing, and which *may* be a fiction. In point of fact, Kant, by-and-by, goes on to show that the *Ideas*, God, the Soul, etc., are just of such origin. These he does not deny; he will put them in place here as *regulatives*, say, affirmative of religion, but negative of fanaticism. Any proof, however, of their *existence* as objects, he leaves for another region. In connexion with what we know from elsewhere, it may suggest itself here, that Kant, quite as much as any sensationalist proper, and even more than Locke, limits knowledge of any object whatever, cognition proper, to what contains actual elements of sense. This will contrast somewhat with all the ordinary *exalted* notions of what a *transcendental* philosophy may be.

Chapter II.—System of the Ground-Judgments of Pure Understanding.

The first section here contains nothing that is of any consequence for us. *Our* quest is of necessity in synthetic, not analytic, propositions. What is said of the condition of time as conciliating apparent contradiction in ordinary analytic averments is intelligible of itself.

In section 2, which concerns synthetic judgments, we learn that, as, in such, two notions are to be brought together and conjoined, which notions are wholly alien the one to the other, and cannot be analytically got the one from the other, the need is a *tertium quid* which shall mediate the conjunction. That *tertium quid* is said to be constituted by what I shall venture to call the *transcendental provision*. And

the transcendental provision consists of those *a priori* forms which are already possessed by the mind in order to produce synthesis, objectivity, on the subjective manifolds presented to us (in sensation) by special sense. The elements of the transcendental provision, now, are pure perception (time and space), the action of imagination, and the radical notions of the understanding (categories) as functions of the unity of apperception. Out of such elements (at once of *sense* and understanding) it is, evidently, conceivably possible *a priori* to realize what may constitute, not the actuality, but the possibility, of an object. It is the transcendental provision, therefore, that constitutes the necessary condition to, that actually *is*, "the possibility of experience." For the *empirical reference* involved in these conditions is always to be borne in mind. That is, it is always to be borne in mind that time and space, and the principles of synthesis on the recognised contents of time and space, have no meaning or purpose whatever but as producing objectivity on the subjective manifolds presented to us (in sensation) by special sense —as realizing or, in fact, simply being, the possibility of experience. All that, in effect, is involved in the very word *transcendental*. The transcendental provision, as I name it, simply as being transcendental, points to experience, points, so to speak, from the *a priori* to the *a posteriori*, or demonstrates the necessity of the one to the other, the necessary nexus between them. To call a thing transcendental, then, is the same thing as to say it has an *empirical* reference. Of course we have just heard again of the "restriction" of all our principles; that they bear, namely, not on "things in themselves," but only on *Erscheinungen*, shows or appearances due to the mere

affection of sense; and must understand, consequently, that "the possibility of experience" refers not to an absolute experience, but only to such experience as is possible to *us*, to us as, sensuously and intellectually, we are *actually* endowed (not but that we *might* have been endowed infinitely otherwise). All that is, accurately and literally, the holding of Kant.

Here, however, it is of the greatest importance that, in this holding, we should perfectly understand what I mean by *empirical reference*. But, turning back to the beginning of the section, we may first remark on a point or two.

Why synthetic propositions are no business of general logic is, obviously, for the reason that, while they involve *material* considerations, the latter is restricted to the bare *form* of the implied action, all questions of the matter concerned being for the moment suspended. But *a priori* synthetics, again, are the precise business of a transcendental logic, which, as transcendental, has simply to explain all that concerns the presence of the necessity of the intellect in the contingency of sense, or, what is the same thing, the presence of the *a priori* in the *a posteriori*. All this, as what is to be explained, Kant conveys by the single word "possibility." To demonstrate the "possibility" of God is to argue towards His existence and nature; and to explain the "possibility" of *a priori* synthetics is to rationalize certain facts as above referred to. In truth, if the one amounts to a Theology, the other (all its parts being complete) cannot be considered less than a Transcendental Philosophy. And of such philosophy we cannot miss now the definition; though, surely, what we offer in that respect above contrasts perceptibly with current notions. The man who

only wants to explain *why* we believe that every change *must* have a cause, has been converted into a vulgar Professor of the Black Art, with a rod in his hand and a cloak on, skulls on the table, stuffed crocodiles hanging, and what not! It is quite true, nevertheless, that, in Kant's sense, the very object of a transcendental philosophy is "determination of the extent and limits of pure understanding;" for it is precisely by determining the constituent functions of, or moments in, pure understanding, that Kant thinks he reaches the source of that peculiar necessity in interests apparently absolutely empirical, which Hume instanced in the proposition of causality—a proposition which Kant himself conceived himself thoroughly to complete and cap when he added to it his own propositions of quantity, quality, reciprocity, etc. It is true, a transcendental philosophy, even on Kant's scheme, may be described as a "determination of the extent and limits of pure *sense*," not less than of "pure understanding," with the result of time and space being exhibited as *a priori* mirages, calentures. Nay, Kant actually extends the transcendental philosophy beyond both the *perceptions of sense* and the *notions of the understanding* to the *ideas of reason;* but still that is a very simple matter, and very unlike the Black Art dreamed. It is even possible to view it, and not quite incorrectly to view it, as something childish. That is, it is possibly childish in Kant to take, out of our ordinary logical school-primers, certain mere terms applied to two or three different propositions, and so practise on them, with a turn this way, and a twist that, as to convert them into his own categorical tables. That, it may be, is not altogether unlike the seriousness of a child at its house of cards. But it is not that which concerns us

at present. What we have to understand at this moment is, that completely to tabulate *a priori* synthetics would be, in Kant's sense, completely to map out the functions of pure understanding; or, what is the same thing, completely to map out the functions of pure understanding would be completely to tabulate *a priori* synthetics. What follows next about analytic propositions and as opposed to synthetic propositions, we shall assume to be sufficiently on the surface. The peculiarity of synthetic judgments, and the need in these of a *tertium quid*, have been already touched on. That, for this *tertium quid*, Kant should at once turn to inner sense, is natural enough; for it is in inner sense that all meets. And, once there, it is equally natural that imagination should be referred to for synthesis, as apperception for unity. Of this latter, of course, the categories are simply the various functions. Kant calls all of these "Quellen zu Vorstellungen *a priori*" (a plural translated "sources of *a priori cognition*" in the singular, as justified by the "zu" and generally); and he means that they are conjointly so. "If there is at all to be a cognition of objects which shall solely depend upon a synthesis of mental elements," it is evident that it is from these it must issue.

The next paragraph concerns one of the most important and peculiar of Kant's principles. This is to the effect that, let a cognition be *intellectually* what it may, it is no cognition proper, it is not properly knowledge, unless and until it have an actual perceptive application, an actual filling of sense, an actual filling through matter of sense. Kant's ruling here is so strong, indeed, that we are to understand even *a priori* sense-matter (that of time and space) insufficient till special sense-matter (colours, feels, sounds, etc.) has come forward to add itself on.

Strange as it may appear, this is Kant's sole reason why we do not know God, why we do not know the soul. We cannot see God, or hear God, etc. We cannot smell the soul, or taste it, etc. This makes Kant's *duality*—the duality by which he would resolve all metaphysical difficulties, as of the freedom of the will, etc. Our principles of intellect applied to things of sense is one thing, but applied to things in themselves quite another thing. Things in themselves are not given us here. Still there is a presumption towards them *practically*, as in Will, Immortality, and God. But of all this there is no question here. We have only to see as yet that, for *us*, there can be no knowledge proper unless *with* a filling of sense. Ideas are void unless with a complement of sense. This complement, now, may be either actual or possible. The former refers to special, and the latter to general, sense. As said, however, even the latter is meaningless and, so far, void, unless there be further given to it a reference to the former. General sense may, so far, give filling to the forms of intellect; but even that is insufficient unless special sense follow. This is what I mean by the *empirical reference;* and the empirical reference must be precisely distinguished from what I call again the *empirical instruction.* Even space and time, though actually *a priori in* us, and so far, it may be said, *ours*, are not *ours*, are not *realized*, until we give them the empirical reference, and for this reference we can always appeal to reproductive imagination—in idea, that is, or in general act. And, this being, it is easy to understand that time and space are a mere schema for realization through reproductive imagination and its objects (imagination, *a priori* as productive, and *a posteriori* as reproductive, being always the receptacle and vehicle of presentation to intellect).

We can see, then, that *the empirical reference* is always free to postulate the general idea of an object for the synthesis of the categories in the element of time and space. It is this *a priori* objective synthesis in time and space that converts the mere rhapsody of our contingent subjective affections (colours, sounds, smells, etc.) into—the context of experience. Colours, etc., are but feelings of our own, and quite contingent, lawless; how, possibly, could they, merely contingent and fortuitous feelings within us, as they are, become this *world*, were there not, also within us, as preparation for them, the necessity and law of the—transcendental provision? This will render the whole paragraph intelligible, and suggest how it is that an *empirical reference* is, even with whatever *transcendental provision*, still necessary to *realize* this latter. Given space *a priori*, one might think that geometrical configuration would possess then all that is necessary to realize it; but no—even then it would be "chimerical" merely unless complemented by the *empirical reference.*

There can be no difficulty, then, in understanding what Kant assigns as the "ultimate principle of all synthetic judgments."

When it is said, therefore, the conditions of the possibility of "experience in general" are the conditions as well of the possibility of the "objects of experience," the apparent tautology, which is apt to stumble us, must be understood as only seeking to add to the *transcendental provision*—the *empirical reference.* This, in fact, the reader will find Kant actually to *say.*

I wish here particularly to note that I do not think there is *more* than the *empirical reference* alluded to in this section: there is no advance in it to the *empirical instruction.*

Section 3. Systematic Idea of the Primary Synthetics.

Looking back a moment, before proceeding to this our final division, we may note a point or two. It is important to observe, for instance, that Kant makes transcendental to differ from general logical judgment in this, that the former, unlike the latter, has *a priori* conditions to *cases*, quite as well as *a priori* conditions to rules, for its business proper of subsumption. By Kant's word "doctrine" in this reference, too, we are to understand that judgment is actually to be *instructed* in that its business; and the reason is precisely said peculiarity of transcendental logic in reference to *cases*. Transcendental judgment, that is, will now be taught by Kant how, by subsumption of the conditions to cases (supplied by the *Æsthetic*) under the conditions to rules (supplied by the *Analytic of Notions*), to produce those *primary propositions* which appear in order as *Axioms*, *Anticipations*, *Analogies*, and *Postulates*. And what underlies this are the usual transitions in ordinary logic. After *terms* come *propositions*, as after these *syllogisms*. Sense, as general source of terms, having been introductorily discussed, terms themselves, or notions, were proceeded to, and now we have reached propositions. In other words, having left Simple Apprehension, we are now in Judgment, while it is further intimated that Reason awaits us. And these three faculties, we are expected to see, constitute together what, as a whole, is commonly called the Understanding.

The competency of general logic to supply an *a priori* canon of guiding rules derived from the mere formal process of abstract intellect, will not be denied; at the same time that it will not be difficult to understand that the *Dialectic* of general logic is produced

by the attempt to use said canon, not formally merely as standard and test, but even materially as organon of new truth. This, again, is the capital point with Kant that intellectual principles are, as such, only formal, and that, for any productive application, they are rigorously limited to the field of experience, firstly, as possible, but secondly, also, as actual. Hence we can understand how, by an intelligible parallel, the transcendental dialectic is due to the attempts productively to use the *transcendental provision* in its own *a priori* seclusion, and without the realization of the *a posteriori* of sense.

I do not suppose that the schematism has presented much difficulty. So far as there is *a priori* in the mind even a *sense-matter* (the details of time and space), there are conceivably already present to it, also, *objects*. The categories, then, as functioning synthetic unity, have already *breadths* on which to act. That is, a certain reduction of sensible details into the articulation (synthesis, unity) of intellect may, even before experience, be allowably pictured. *Presentation* of the one element to the other element, of *a priori* sense to *a priori* intellect, or of the forms of the one to the forms of the other, seems, in the circumstances, an operation necessary. This necessary operation is committed to imagination. Imagination, indeed, is, as in reference to intellect and sense, the natural go-between; for, as capable of exhibiting an object, it holds of sense (receptivity, affection), while, as capable of producing an object, it holds of intellect (spontaneity, function). The categories, then, are, through imagination, brought to bear on the *a priori* of sense (the details of time and space); or these latter, through imagination, take on the influence of the former; and the schemata result. The schematism,

in short, is precisely the same thing as what is called elsewhere the *synthesis speciosa*. But a schema cannot be a single individual image; it is only a general receipt towards the imaginative production of a whole class of images. With all this, however, the great point to remark here is the positive way in which the schemata are just *set down*. "The schema of causality is the *reale*, which being, something else always ensues." "The schema of *reciprocal* causality is the simultaneous action of this on that, and of that on this." We just read as much as that; introduction, explanation, *rationale*, there is none vouchsafed us: Kant simply takes it for granted that his readers will take it for granted that these are self-evident results of the coincidence of *a priori* form (the categories) with *a priori* matter (time and space). The question is never for a moment whispered,—After all, *are* they coincident? Let us see. Evidently, however, if time is to co-operate with the categories of causality and reciprocity towards such results as the schemata named (and just as so named they are directly affirmed of time)—if time, I say, is to co-operate towards such results with the categories of causality and reciprocity, its succession must be capable of exhibiting, in the one case, the type of influence *prospective*, and again, in the other, that of influence both *prospective* and *retrospective* at once. Now time as time is only a transit of uniform but indifferent units. There is no type in it of influence at all, whether all forwards, or all backwards, or both at once. Such schemata can result, then, only from a glance at actual fact, or they can result only from *empirical instruction*.

Then the reason for all this! Things are only contingent; and yet in certain cases they exhibit necessity. That necessity cannot belong to them in them-

selves, then, but must come upon them from elsewhere (the epigenesis). But things, now, are only our own sensations; and any necessity that falls upon them must only come from us. In short, through *analogy*, we let fall, on our own affections, shadows from our own functions. In these shadows things *seem* necessary; but if things which, as contingent, are absolutely insusceptible of necessity, seem necessary, the necessity implied can only be the unconscious imputation of a necessity of our own—a necessity flung, shadow-like, from our own constituent tree of consciousness. This may help a general understanding.

To return to the section immediately before us. The first sentence here seems tautologically inconsequent, and tautologically unsatisfactory generally. I have done my best with it; and perhaps, as put in English, it represents now Kant's meaning. In itself it is of little consequence, and we may content ourselves by catching up its general drift of sense. There is in it a "nach welchem" which might have been quite as well a *nach welchen*. The "source" and the "propositions" refer both to the same thing. The translation will be taken to prefer *nach welchen;* but it will be seen that connexion with "nach welchem" is really not denied by it. It is just possible that as in the concluding sentence of the preceding section, here, too, "experience in general" is contrasted with "objects" of experience, and in a similar manner, or with regard to the *empirical reference*. In the next sentence we have what we may call Kant's touch-stone palpable and bare: That wherever we have necessity, there also we have the *a priori*. Of course, that being so, any necessity in the laws of nature can be no exception: if laws of nature are necessary, then these laws are also *a priori*. Most people who read

this look at once away out to the immense nature that is before them, and, so looking, think with some wonder of that vast spectacle being after all pliable and obedient to principles from within each one's own mind. Much of the wonder would cease, however, if they would only realize where Kant *is* when he says what he says. He is only within himself, that is, and has only his own contingent feelings before him. But contingent feelings (as of colours and sounds) constituting the whole of that immeasurable *material* bulk that seems to us without, it is evident that any law apparently existing in the bulk itself must simply be, so to speak, a corporealization and externalization of mere connexions among the contingent inward feelings. Kant's very hypothesis compels and confines him to as much as that. Nature, then, to Kant, is, *materially*, but a skein of our own inward feelings falsely reflected into an infinite outside of colours, sounds, etc.; while formally, again, this same nature is but the strands in the skein, and the lines in the skein, and the rolls in the skein, similarly reflected, as laws, and rules, and principles, *into* the bulk. Evidently, then, to Kant even any empirical law, as that of gravitation, must stand under the categories of the understanding, which are the primary and fundamental principles of connexion in our own subjective contingent feelings of colour, sound, etc.; and, so standing, any necessity they may possess must manifestly be a necessity from the internal principles under which they stand. Such considerations as are implied here are calculated to extend the necessary correction of the false position from which *we* are apt to hearken to Kant when he has such words as nature and laws of nature in his mouth. *I* may wonder that the necessity by which the tides rise should be imputed

to me; but Kant, seated once for all within his own mind, and his own feelings, and his own intromissions with these, cannot so wonder: he must hold the tides, and the sun, and the moon, and the starry host (in a certain way) to obey *him*. To Kant, indeed, not only his own self, but every separate individual, let him be Thersites, or a Pandarus of Troy, or the pitifulest "petty-larceny rascal," must be a sort of Joshua the son of Nun, who made the sun and moon stand still, only an infinitely mightier. From all this, it is quite evident that to Kant *any* law in the empirical things, or, what is the same thing, in the empirical feelings, must be only a case under a higher rule within us.

What follows, whether in the same or the mathematical reference, is easy. The distinction between mathematical and dynamical categories is also on the surface and clear. One hesitates, however, about the alleged difference in their evidence. If categories are necessary, for example, and if it is precisely necessity that is their express mission and use, what are we to understand by the contingency which is still ascribed to the dynamical categories? While the mathematical categories are "out and out necessary," the dynamical are "in themselves only contingent." I know not that any expounder of Kant has ever stopped at this: all of them, so far as I know, have merely passed on, contented with the general position, that the function of the categories, and of all the categories, is only to give necessity. Some expounders, very strangely, indeed, have simply inverted Kant here, and have, even infinitely, subordinated the action of the mathematical to that of the dynamical categories. And the reason for this was that the latter concerned *existence*, while the former concerned not existence, but only imagination! There never was a greater mistake.

There is certainly a *verbal* reference to existence assigned to the dynamical categories, and no such verbal reference assigned to the others. But these latter have *factually*, for all that, a much more direct and intimate reference to existence than those former. Why, the mathematical categories are "intuitive," "constitutive," "apodictic," while the dynamical ones are only "discursive," "regulative," and, in some way or other, "contingent." Kant directly tells us, (II., 154) that the mathematical categories are "constitutive," because they expressly enter into the actual "construction" of objects themselves. Surely that is *existential* enough. This, again, in the other reference is followed up thus:—"Quite otherwise must it be situated with those ground-propositions which have to bring under *a priori* rules the existence of objects. For that (existence) being incapable of *a priori* construction, these propositions will only refer to *relation of existence*, and avail to contribute, consequently, only *regulative* principles. In this case, therefore, there will be no question of either *axioms* or *anticipations*. But, *one* perception of sense, in a certain relation of time to an *other* (for its part not necessarily determined), being given us, they (these propositions) will authorize us *a priori* to say *how*, in said *modus* of time, the latter object or perception is necessarily connected with the former object or perception from the point of view of their existence mutually, but not *what*, from the point of view of extension and intension (quantity and quality), said latter perception actually is." Evidently, we are expected to understand from this that, while mathematical categories actually "construct" objects (out of the given sense-manifold, of course), dynamical categories have nothing whatever to do with the objects themselves, but only with

the rule of their connexion, the one with the other, *relatively* in time. We are expressly told that *existence* is incapable of *a priori* construction, and construction in that position is equivalent to production. Even in the case of the mathematical categories, then, it is not existence itself that is to be attributed to them, but only the construction of objects out of the elements of existence, once these elements have been given us by sense. For that is always to be taken with us, That all *material* elements are furnished by *sense* alone; so that even when I talk of Kant believing the tides, and the sun and moon, and the stars of heaven, to *obey* him, I mean no more than that. They *obey* him—once they are received; but they themselves as objects (whatever modification even as objects they take on from him) have to be waited for, and can only be received through sense. What they are conceived to obey are assumed *a priori* laws of necessity within. Surely a transcendent dotation of native night has been vouchsafed to those views which, missing the very manifest general drift of Kant, are not kept right even by a literal reference to "the *relation* of existence!" Kant's time and space are to be marvellously peculiar entities; and no less marvellously peculiar powers his categories. They shall constitute together a *transcendental* philosophy, and we shall understand by it at last how the actual facts of experience get located into their own *definite* points of space, and dated into their own *definite* moments of time! And *transcendental*, alas, means only *why* we take it for granted that everybody's head will *necessarily* indent everybody's pillow! Kant has nothing to expound to us but, in explanation of David Hume's query about *necessary connexion* all undoubtingly attributed by ourselves to matters quite em-

pirical, his own hypothesis of an intellectual epigenesis that consists of time, space, and the categories. I am told, in this reference, of certain devotees of Kant, who "feel attracted to the *grossartigen Formen* of this latter's system" rather through professional exigency "than any clear consciousness," that they refuse to believe any so prosaic statement in his regard; and I am reminded hereby of the medical student who, having opined, when under examination for his degree, that the number of the teeth was eight-and-twenty, and being reproachfully asked, then, did he not know that it was thirty-two, exaltedly responded, with a shake of his head, "that he begged to doubt it."

The dynamical categories concern, then, only "*relation* of existence." They have no power whatever as regards production of existence, and they have no power whatever as regards *definite* location in either time or space. Both the one and the other, production of existence and—consequently even—*definite* location in time and space, are exclusively due to the products of special sense. The mathematical categories do, indeed, act formingly on these products, once they are given, and once they are located, but they have no influence whatever either in giving or locating them. The dynamical categories, again, do not even act *formingly*, they only raise the actual *connexions* of the products of special sense into a new force—through *analogy*. The things, on the connexions of which they act, are, of course, in time; but these things do not take their place in time from the categories. It is special sense alone that even prescribes the *relative* places of things in time. The categories only insinuate the reason and necessity of a rule into the mere relation of position, once it is given and as

it is given. The sun rising, an exposed stone warms. Sun and stone are both due to special sense, so far as their elements of sensation are concerned; the categories of quantity and quality (the mathematical categories) then act formatively on both sun and stone, but only in the direction of their extension and intension; and lastly, the category of causality raises the mere subjectively logical proposition, when the sun rises, a stone warms, into the objectively logical proposition, the sun warms the stone. But, after all, the only ground that said category has for this elevating action is the mere *analogy* of the intellectual function called antecedent and consequent.

I think now, then, we are prepared to understand how it is that the dynamical categories are inferior to the mathematical ones, and in what sense it is that the former are said to be in some way contingent.

Suppose it is through the mathematical categories that we are able to perceive both sun and stone, whether in quantity or quality, then, evidently, the action of these categories brings with it the character and evidence of immediate and direct perception. It is intuitive, not discursive; constitutive, not regulative; apodictic, not contingent; out and out, and not only conditionally, necessary. But conceive now we connect, hypothetically, but logically, within our own selves the heating of the one object (the stone) with the rising of the other object (the sun); conceive, further, that then only the category of causality epigenetically bestows its own power of apodictic necessity on the empirical connexion actually in force; and I fancy it will not be difficult to understand how it is that the dynamical principles "bring with them the character, indeed, of an *a priori* necessity, but only under the condition of the EMPIRICAL thinking that

shall be found in an experience." That the sun warms the stone is a proposition which we all assume to be apodictically necessary; and the proposition itself, further, being synthetic, the necessity contained in it must be allowed to be *a priori*. Nevertheless, analysis proves that it is only under a "condition" that we attach this necessity. We have first of all *empirically thought* a connexion between the two objects—between the two objects as in experience. Not only, then, the objects themselves (as mere objects of experience) are contingent, but even the connexion between them, as in the first instance only *empirically thought*, must be allowed also to be, so far, contingent. It is only the *analogy* of the connexion in the empirical facts with that between antecedent and consequent that raises the former into the force of the latter. Plainly, then, the dynamical categories do not "possess the same immediate evidence which is proper and peculiar to the others;" they exhibit the character of necessity "only mediately and indirectly," "only conditionally on an *empirical* thinking in an experience;" they are not "apodictic or unconditionally necessary," but, "in themselves only contingent." Or, to take the extract from 154, these categories "only refer to *relation* of existence and only contribute regulative principles, for existence itself is quite beyond the power of the *a priori*;" "there is no question of either *axiom* or *anticipation* in their case, but sense-perceptions being given us in certain time-relations, said categories *authorize* us to assert necessity of said relations." All these matters seem so very plain that it is scarcely credible that any one should miss them. Nevertheless, when I tell certain students there are thirty-two teeth, I quite expect to hear from them in return, "We beg to doubt it!"

The note here is very Kantian in its quality: all conjunction is either composition or connexion; the latter necessary, the former non-necessary; the former mathematical as of like to like (and so either extensive aggregation, or intensive coalition), the latter dynamical as of unlike to unlike, either as referred the one to the other, or all to the mind (physical and metaphysical). It is easily made intelligible by taking the four categorical classes respectively in their order.

1. Axioms of Pure Perception.

I may remark finally here on the word *Anschauung*. It really is nothing but perception—consciousness with an object before it, said object having elements of sense in it, general, or special, or both. It is so easy to make this good by thousands of examples, whether from Kant or the rest (Fichte, Schelling, Hegel), that I must be allowed to express my surprise at the myriad stumblings over a very intelligible term, not only on the part of foreigners, but even on the part of original Germans. An *Anschauung* is a perception, consciousness of an object of sense; and the faculty of *Anschauung* is the faculty to perceive—almost the faculty to *object*, if the accent be put upon the *ob* to distinguish the word from the ordinary verb to object. *Wahrnehmung* only differs from *Anschauung* in this respect, that it accentuates the fact of the presence in any consciousness so named of elements of *special* sense. Kant, of course, believing in an *a priori* sense-material (time and space), can conceive himself to perceive *without* elements of special sense. In that case, he *schaut an*, while in the other he *nimmt wahr*. This is the state of the case *always*—

when the words are used strictly; but we are not to suppose that that is at all times *de rigeur*, to use an involuntary tautology: Kant himself can talk of an "empirical *Anschauung*," and an *empirical Anschauung* is exactly a *Wahrnehmung;* he, as pointed out elsewhere, even says, at least once, "empirische Wahrnehmung."

That all objects are extensive magnitudes Kant conceives to depend on the fact (of course *with* the category) that all objects of sense must present themselves in space, which being extensive, they, too, are necessarily extensive. By the phrases "a determinate time" and "a determinate space," he means (generally) only a time and a space determined into a definite time and a definite space by being filled ("determined") by actual possession of some object. The connexion of geometry with space needs no comment. Here Kant is found again to insist on the subjective nature of the things of sense, which things, were they objects in themselves, would, for knowledge of them, require to be waited for, so that any *a priori* in their regard would be manifestly impossible. The reader will please to remark how much or how little information even Kant himself asserts for his *express category* of quantity—information for the whole of which, surely, he (having an intellect) need only apply to his own space and time. Of course, Kant will have it that he can get synthesis into space and time only through a category: things are aggregations of units in consequence of the nature of space, but they are also unities of aggregation because of the category quantity. Note, too, that were objects things in themselves (and consequently perceptively to be waited for) the geometrical *a priori* in them (for synthetic necessity *must*, with Kant, be

a priori) would be plainly unintelligible. Is this quite certain? Might not space and time be things in themselves, and yet have necessary relations, though it were only *a posteriori* that we could come to know either the one or the other?

2. Anticipations of Sense.

We have emphatic declaration, on the part of Kant here, of the impossibility of anticipating any empirical fact, or anything empirical in regard to it, either as concerns time or space, or anything whatever. Nevertheless he still claims for his transcendental machinery a power of actual anticipation in regard of something that holds of sense. This is degree. But, surely, there is very little show here to boast of. That I can *feel* is at once degree, is at once intensive *quantum;* and it is really a very small matter that I rate certain objects according to the degree of feeling they produce. That feeling being so situated with me, I am not warranted in asserting at any time, from the want of it, that no matter is present—that too does not seem much. Objects can easily be supposed too weak to act on my senses; and there really is no surprising enlightenment in the fact that what seems to me a void of space or a void of time *may* still be filled by a matter that is of a weak intensity. Neither does there appear much promise in the proposal to substitute degree of intension for the current hypothesis of pores. If the same amount of actual matter can be expanded into much space or compressed into little, surely the supposition of pores is a very natural one—a supposition, moreover, that is supported, and very satisfactorily and consistently supported, by scientific calculation. The remaining noticeable point

of fluent or continuous quantities does not seem to involve anything of a discovery either, for which we have to admire a transcendental philosophy. On the whole, as I say elsewhere, there does not seem much need for a special *a priori* category to tell us no more than that there is such a thing as degree. In regard to the phenomena of change, Kant himself says a good deal here to suggest that, for his schema of causality, he must, in point of fact, have had recourse both to the *empirical reference* and the *empirical instruction*.

The section itself is easy, but I may indicate its general course by a word or two. Reality involves the conception that we can be sensationally affected in our subject, and that this subjective state is referred to an object. Sensation *adds* this element to pure perception (of time and space). Now we can assume as much as this to be *a priori*, and of transcendental function. That is, we can *assume* the function of sensation and as much as the bare function implies. But what it implies is a reality (something, an object so far) in time and space. Now, in the very action of this function, there is a gradation—a gradation from a certain somethingness downwards to nothing, or from nothing to a certain somethingness upwards. This is degree. It is not duration of time, but amount in the filling of time. But this degree attributed to the objects, we have what is characteristic of *intensive quanta*. And as much as this being capable of *a priori* assumption, we have the right to call it an actual anticipation of sense-perception—an anticipation, plainly, not of the matter of sense-perception (which is impossible), but of a certain law in the matter, let that matter be specially what it may. There is always to be assumed the

possibility in the reality of this matter, of an infinite series of degrees between negation and affirmation. Whatever the amount of the reality, however, so conceived, its sensation is momentary or instantaneous. The unity implied here is that of an intensive *quantum*. But, in explanation, as much as this shall suffice, and we shall leave Kant's relative corollaries —after what has been already said—to the reader. Surely, there is hardly the tip of a feather to be mounted in regard of any one of them.

3. The Analogies of Experience.

The reasoning here, taken very generally, seems to run somewhat in this way. We see that experience consists of objects in necessary connexion; and can understand that experience, to be experience, must be a context of necessary connexion. But objects as first received by us are so many indifferent blurs of units of sensation; for sensation only receives, it cannot connect. The question, then, is, What is it that connects? The units of sensation are in time. That is, they are series in the succession of time. But that succession imparts, so, only a certain extension; it does not unite or connect. All this, so far, must be so; for what we know are not things in themselves, which, as such, of course, would dictate to our cognition their own qualities, and in that case, evidently, there would be no such element as the *a priori*, or, what is the same thing, apodictic necessity, in experience at all. All our knowledge then would have to wait for the fact, be after the fact; or it would be only *a posteriori*. The same considerations concern time: it is no thing in itself *a posteriori* to prescribe to the objects in it; it is but an *a priori*

subjective form of our own, and is only there as recipient into its extension of our own subjective units of sensation. The question recurs, then, Where can the synthesis of such materials, and so placed, come from? The answer can only be, From our own selves, from our own understandings. It is the understanding only in us that has power of synthesis; and its synthesis is absolutely necessary—absolutely necessary if I am to call anything whatever *mine*. Nothing can be mine, nothing can be for me, unless it be synthetically bound together into the unity of my apperception. But it is the categories do that; the categories are the various functions of synthesis into the unity of apperception. Again, however, it is not the categories that act directly on objects. What act directly on objects are the *schemata*, to which, of course, the categories are the principles. Now the *schemata* are certain determinations of time; and time, on the question of relations, can exhibit only three such. These are *duration*, *sequence*, and *simultaneousness*. In quantity and quality we were concerned with the actual *what* of objects, with their actual body, so to speak. Here, however, we have only to do with the relations of such bodies mutually: we have not to do with the bodies themselves, but only with the rules on which they may depend—depend even for existence, it may be (the effect depends for its very existence on the cause). Still there is nothing in these rules that produces or constructs any actual existence. Actual existence, actual place in space or position in time, can only be *given*—given by sense. This appears to me pretty well the gist of the section; but I shall now go over it for notice of individual points.

The reader must be on his guard with the word

perception. I am obliged to use it both for formed perception and for crude. Here at first it is crude perception that is spoken of. Perceptions in that case are but the units of the first crude perceptive blur before sense the instant that sense is affected. Formed perception results from the introduction into these units of necessary connexion in the elements of space and time. Experience is an empirical cognition: it determines objects in consequence of sensations. It is a synthesis, then, *of* these, and not *in* these: it implies and effects the synthetic unity of the sensational variety of particulars in a single consciousness; and *that* constitutes what is essential in a cognition of *objects* of sense, that is, of experience. What is empirical *only* is contingent; consequently, *should* anything empirical exhibit necessity, that necessity cannot be proper to it, but must have been borrowed by it, and from some element that could be only *a priori;* for everything *a posteriori* is by very nature contingent.

I need hardly point out that neither *duration* nor *simultaneity* is a determination of time as such. Time fleets only, and no two instants of time can possibly be simultaneous. Sequence, of course, is a *modus* of time, and, so far as that goes, its only *modus;* but neither is there in that sequence the faintest hint of such another sequence as the causal one. There is not only a necessity for appealing to the *empirical reference* for the realization of these *modi;* but they themselves, that is, substantiality, causality, and reciprocity, are wholly due to the *empirical instruction;* which instruction contains the entire problem, and Kant's whole laborious construction is but a house of straw beside it.

Kant makes it very evident, however, that his prin-

ciples have no power to dictate any actual constitutive empirical element, whether any empirical objective unit, or any empirical space, or any empirical time. What is concerned here, he tells us plainly, has nothing to do with "the synthesis of the empirical *object*," but only with "the mutual *relation* of objects in regard of their existence" (what in its existence shall precede, for example, and what in its existence shall follow), but leaving existences themselves, as well as their time when and space where, wholly to the empirical element. "Able to infer in regard to some certain existence, we are quite unable, nevertheless, to cognise, perceive, or anticipate that existence." I have already quoted the paragraph which throws the unmistakable light here into why the categories of relation are discursive and not intuitive, regulative and not constitutive, contingent (so far) and not necessary; and I would only again draw the reader's attention to this. The whole affair is, how an empirical connexion (which as empirical is pronounced contingent) gets raised into the force of an apodictically necessary connexion. "A rule whereby to look for it in experience, and a mark whereby to recognise it there when found." This, as so often said, must neither be chronologically nor geographically understood. No *a priori* element whatever can *anticipate* either actual space, or actual time, or any actual object in the one or the other. What rule is alluded to is such general rule of causality, that the effect always *follows* the cause, or the cause always *precedes* the effect; "but in the production of these objects themselves, as empirical objects, it has no power or part whatever." We have a sentence here which makes quite clear Kant's consciousness of the *three grades* (*form*, *matter*, *connexion*) in his categories.

A. First Analogy.

What is in Kant's head here is this. What are called *things*, being merely contingent affections of our own subject, are, of themselves, and as such, incapable of exhibiting, *in point of fact*, any such peculiarity as the idea of substance involves. The inference, only necessarily consequent, then, is, It is our own understanding which, on summons of analogy, reflects its own self, in its category of substance and accident, into our own subjective affections of sense; and hence only it is that we have the correspondent necessary objectivity in things. All, however, is so clear here that, after what has been already said, I know not that I am required specially to dilate. The reader, too, probably, stands now in little need of being helped to a suspicion—under all the apparent philosophizing—of the *empirical instruction*. In fact, Kant's phrase "the possibility of experience" may seem in the end to be stretched to cover, not only the *transcendental provision*, and, in addition, the *empirical reference*, but also the *empirical instruction*.

B. Second Analogy.

The sun warms a stone, the air recoils to pressure, frost solidifies water, currents drift a ship, the stove heats the chamber, the glass attracts the water, a bullet indents a cushion: these are Kant's own instances of causality. Now, in all these phenomena, there are an antecedent and a consequent, the connexion between which we know, feel, or believe to be necessary. The question is, therefore, on what does this belief, feeling, knowledge, or inference, of necessity rest? Hume, who set the resultant inquiry a-

foot, avowed that he could conclude to no source for the connexion implied unless the workings of a natural instinct, for which he could offer no *rationale*, either, but the known effects of custom. Custom, however, is evidently quite inadequate to the apodictic necessity which is concerned. This Kant saw, and he was led, consequently, to seek for some other explanation. This explanation lies in what he calls his *intellectual epigenesis*. His theory, namely, is, that the facts, as empirical, are themselves contingent, but that, through analogy, we impute to them a certain intellectual necessity which is the product of our self-consciousness, the product of our very selves. Manifestly, however, we have only to look at Kant's own examples to find how impossible it is to accept this. If the sun warms the stone, we feel sure that the necessity lies in the things themselves, and not in us. So it is with the current that drifts a ship, surely it is of itself that the current necessarily does that; and for the indentation of the cushion under the bullet, how on earth can it be anything in us which effects a necessity of such a palpably external origin as that? Or—just fancy this—is it *we* make the air elastic? What I wish the reader to see in this section is that Kant himself is constantly staggered by an involuntary reference to the state of the facts themselves; but that, as he believes absolutely in the necessary contingency of all that is empirical, he finds nothing for it but again, and again, and yet again, and interminably, to assert that a synthetic necessity *cannot* be *a posteriori*, and *must* be *a priori*, and so—his intellectual epigenesis of categories of apperception and schemata of time! Nevertheless, we have always to bear in mind his own words (II., 156), "We shall be authorized, therefore, by these principles, to set the *Erschei-*

nungen (the units of sensation) together only as in analogy with the logical and universal unity of the categories." That is, I perceive, the sun rising, a stone to warm; but so far the relation between the objects is as contingent as the objects themselves: only when, *by analogy*, I have apotheosized the empirical multiple of rising sun and warming stone into the necessity of the categorical multiple of antecedent and consequent does the former quit its contingent frailty and assume, instead, the apodictic perpetuity of the other. With such considerations in mind, indeed, it is not likely that we shall ever stray far from the *intention* of Kant's words, however peculiarly they may at times sound in themselves.

The section now before us, *B*, is a particularly long one; and this very length may be taken as a proof, perhaps, of Kant's own sense of a mortal quandary all through it. Had it been quite plain, namely, that the "idea of necessary connexion" in causality—*a* "voucher," or *the* "voucher," for which Hume (only able, for his part, to suggest a natural instinct on custom) simply asked—was but a reflection, *by* analogy, *from* intellect, *to* sense: had this been quite plain, I say, Kant would have found no difficulty in saying it in a page or two; rather, he would have found it impossible to fill up, with no more than that, a score of pages.

I fancy every reader will find himself not without unwelcome doubts at the very outset here. The proposition laid down to be proved is, "All changes follow from the law of the connexion of cause and effect;" and our first thought is, No one ever doubted that. Kant himself has already said the same thing a thousand times, No change but has its cause. That, indeed, is simply the one hard fact, for which it is pre-

cisely required of us to advance, not the ὅτι, but the διότι. We have no difficulty whatever with the state of the fact—with the actual existence, that is, of "an idea of necessary connexion," on our part, between every effect and its cause. All that we want to know is the explanation of this. *Relations of ideas*, as we know, are necessary. Parallel lines never can meet; the three angles of a triangle never can amount to more or less than two right angles. *Matters of fact*, on the other hand, are contingent. The sun shines and wood burns; but they might not. Now, it is in these latter that the law of causality has place; and the question, consequently, is, How *can* any idea of necessity enter into *matters of fact*—into things which, in every point of view, are themselves contingent? Billiard balls, for example, are but things of the senses, and any intromission, the one with the other, among them, cannot possibly be aught else than a matter of fact. How is it then, that, for all that, when the ball at rest is struck by the ball in motion, I have the undoubting conviction, the apodictic conviction (which, it is admitted, *experience* of itself could never give), that it is *of necessity* the former moves? Here is an "idea of necessary connexion" in *matters of fact;* which, plainly, as contingent, are, in regard of any such, absolutely heterogeneous and alien. The question, then, is of the origin of this idea.

This is the difficulty we experience with the very first word of Kant in regard of causality. We do not want the mere proposition, namely, to be simply set down, and then to be followed by a formal "proof" of it—a formal proof of it, the proposition. Of that we have no need. We accept the proposition; and we ask only the source of the fact it affirms. We know that Kant, agreeing with Hume in regard to

this source being necessarily *extrinsic* to such facts, could not, at the same time, content himself, like the latter, with placing it in a mere instinct or a mere habit of our own, but, in view of the apodictic nature of the validity involved, felt under an obligation to seek for it where only, as he believed, such validity was to be found—in a synthetic *a priori* at once of intellect and sense, namely. We know this, and we know what it all comes to in the end; but still we experience the dissatisfaction named, with the very first appearances that are to lead to this end.

Kant here (paragraph 1) precedes his "proof," parenthetically, by what he calls a "*Vorerinnerung*." As amounting, however (admittedly), to no more than the proposition under substance, one hardly sees the use of it at first. But this use lay possibly in the notion of change, which was now made prominent. All sensible succession is only change; and change, strictly, is never either a coming to be or a ceasing to be. Change is but the consecutive determinations of substance; or substance, one self-identical subject, as existing in two opposed determinations the one after the other, yields the notion of change. This is the tenor of the "premonition;" and the same tenor reappears once or so again. But still it is, after all, pretty well foreign to the matter in hand, and as actually taken in hand by Kant himself. There is no truth whatever in the allegation that all succession is change. All succession does indeed imply change; but succession as succession is by no means change as change. Gun succeeds gun in distress; soldier, soldier on the march; but gun does not cause gun; nor soldier, soldier. Nay, the successive states of substance (or of any single subject) do not, when regarded only as successive states, really represent change.

In order fairly to have the conception of change in a succession, we must introduce a reference to the cause or causes on which the succession itself depends. That is, though a succession may be called, and, in a certain way, *is*, a change, the notion of change proper demands reference to a cause; and there is, *formaliter* and *expliciter*, no such reference in any succession merely as such. Consideration, then, of the states of substance themselves even as a series, is not by any means necessarily introductive of the problem of causality; and it is the problem of causality that is now in question. Of two consecutive states, certainly, say cold and heat in me, the one, as first, may be called A, and the other, as second, may be called B; but the state A is not the cause of the state B. The cold that was first or A was not the cause of the heat that was second or B. B, as only after A, succeeds A, or forms a succession with A. But it is only when the idea of mere succession has been abandoned, and reference to a cause introduced, that we get the idea of change. Or it is only when we regard A B, not as a succession of A and B, but as a change of A *into* B, that we arrive at the idea of causality and the actual problem in hand. We have only, indeed, to consider Kant's own examples of causality to perceive how independent they are of any reference to substance. Warmth in a stone follows the light of the sun. Here it is not the succession of states in the stone itself, not the A B of cold and heat in it, that is considered; but something altogether different, an absolutely other A B. In fact, the A now is not in the stone at all; it is the light of the sun; and the B now amounts to the whole of the previous A B; for the previous A B is now regarded, not as two but as one, a one act; and the whole question is of a

cause, a new A, for it. Now this question of a new A is precisely what is distinctive, what is constitutive of the problem we have come to. In fact, the question of that new A *is* this problem. But this new A is not at all present in the A B that singly occupies the whole of Kant's own *Vorerinnerung.* Therefore it is we say that said *Vorerinnerung* is, in this place, no introduction. The reader will do well here to refer to the other illustrations (already given) of causality in Kant.

It will be superfluous to call attention to the confused and vexatiously cross nature of Kant's expression in this *Vorerinnerung;* that will have been but too obvious. I shall point out only that all that is meant to be said in the first place is, *What* is, permanently is, let its determinations succeed each other as they may; and in the second place, that *therefore* all changes are but these successive determinations of substance. Of how it is really situated with this *therefore* we are now perfectly aware: to say that all changes are mere successive states of substance is not to say one word that throws light on causality as causality, or even, as we shall presently see, on Kant's theory of causality. Kant, under influence of the present idea, simply forgets himself. If "all succession in sense-units before apprehension is only change," how is it that he can tell us elsewhere of other units that so succeed each other that they are quantities, or again so that they are qualities, or *reciprocities*, etc.? This, in fact, is matter of suggestion in the "proof" itself, to which we now proceed.

What is said in the second paragraph here is accurately this: Impressions of sense are feelings in my subject, from which subject they, as soon as felt,

receive the perceptive forms of space and time. Now, all the elements here have (or are) certain breadths or pluralities of parts: certain constitutive details, distinctive of each, enter into or compose them. But while simply thus in subjective affection, the units of impression can only be apprehended indifferently after one another: they are but successively taken up in the element of imagination, which is at all times the receptacle and vehicle of whatever is presented to consciousness. This, in perception, is the first stage, or that of mere *apprehension*—apprehension, namely, of what elements (both specially and generally of sense) are, for further manipulation, taken up or on by imagination. So far, then, there is as yet but *apprehension*. Units of special sense (colour, say), units of general sense (as of time) are but passively received into the imagination. But, as thus only passively received, all these units are a mere indifferent, disjunct after one another. So far, there is affection only: element of function (synthesis) there is as yet none. But in actual fact we do find that this element has come to be added. These mere units of passive subjective impression do, in the end, constitute, so to speak, the condensed and concreted *objects* in the interconnected context of actual *experience*. Plainly, then, function has intervened, and synthesis been operated. But we have already before us all that could take place from without. All, then, that we see further take place, can only do so from within. Synthesis (function) is no affair of sense, which is passive affection only. Synthesis, that is, can only be a product of the understanding. In other words, it is only the categories which, as constitutive of the understanding, function synthesis.

In the case immediately before us, for example,

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what but a category can convert the mere indifferent after one another of the passive sense-units (whether general or special), only orderlessly floating, so to speak, into a necessarily-fixed connexion, where an A *must* precede, and a B *must* follow, without the barest possibility of interchange or reversion—what, I say, but a category can effect this? The ingredients of apprehension come into imagination after one another; but all so far is passive and orderless; and all so far is only subjective and within: what can act upon it from within—(there is nothing further to act upon it from without)—but a law within, a law of the understanding, the law of one of its categories, the law of the category of cause and effect, which itself depends upon the logical function of antecedent and consequent?

This is really Kant's "proof," and this is really the whole of Kant's "proof." He is bound down to the contingent subjectivity of impression, and can find synthesis for it, necessity for it, a law for it, only from what is still further within—the intellect itself. Of course the whole thing is a figment in the air. Objects are not mere bundles of our own merely subjective impressions: they are independently without. There is no *modus* of time, either, for the function of antecedent and consequent to clasp and coalesce with. And the impressions themselves have their own order—for Kant himself (to get his category to act) *must* have their own order. But still, for all that, Kant's "proof" is nothing whatever else, and he can only repeat it, and yet again and again repeat it *usque ad* obscurity and cloud. What else, indeed, in the midst of all the quakings and shakings and slidings of the soil beneath his feet, can there be left for him but to repeat?

Before leaving this paragraph, I have yet one other point to signalize; and it is what concerns time. "For," says Kant, in allusion to what sense-multiple shall eventuate as causal, "time cannot in itself be perceived, so that what *in the object* precedes and what follows may be determined *empirically*, as it were, in reference to it" (time). Now, we know that Kant's time, though a form from within, *is* empirically determinative, and quite in the same way empirically determinative, as our space, though an object from without; and we know, moreover, that this is Kant's own express teaching. Both in the one and the other regard, then, we have difficulties here. But it will suffice for us at present to make out what it is that Kant, at this moment, has specially and particularly in his eye. Now that is this. Experience to Kant, let his forms do what they may, is still from without. Berlin city or the battle of Rossbach, he has no pretensions to find within his own self. Still the *impressions* constitutive of Berlin city or the battle of Rossbach are received into a time and space of his own. So it is that these impressions are to him passively, indifferently floating units of impression, and, for synthesis, require a category and categories. But it is only because time and space are mere subjective mirages of our own senses that this *can* be so. Were time and space actual objects in themselves, and such that we cognised them as actual objects in themselves, then the impressions of sense, *other* objects, would be simply their contents, and astrict, consequently, to the positions and connexions they themselves (time and space) prescribed. Time and space, Kant says himself, would then "empirically, as it were" (and that means only actually) "determine," "*in the object*," what should be first and what second.

One sees here, then, that that marvellous "all-embracing unity," of such marvellous, dogmatic, absolute potence in disposition of this empirical universe, which, as a profound discovery, is attributed to the space and time of Kant, this same Kant out and out denies for himself and actually attributes—crushingly—to the other side! Kant's time is thus, as we have it here from his own mouth, powerless to "date!" Surely, too, the argument in regard does not want for a thousandfold repetition. If time and space are only *subjective* forms, it is quite plain, in fact, that they can *not* be *objectively* determinant; and, as said, this is Kant's own perpetual refrain everywhere: time and space have no influence whatever in *production* of actual objective experience, but only in *location.* In this latter respect, indeed, they are to Kant quite as they are to us: they actually, or empirically, impose on things the peculiarities, structurally, of their own constitutive details. "We maintain the *empirical reality* of space (in regard of all possible external experience), but at the same time also its *transcendental ideality*, or the fact that it is nothing so soon as we withdraw the condition of the possibility of all experience, and accept it as something that essentially belongs to things in themselves." This (II., 38) is, in that respect, Kant's incessant declaration; and time, in the same reference, is always viewed in the same way (see II., 44). Whether as forms or as things, time and space are, in point of fact, quite the same determinating *receptacles.* There is only this difference, that, were they things (things in themselves), and did they receive things (things in themselves), then—and then only!—they would geographically place in space and chronologically "date" in time; for then, and

then only, says Kant, they would "*empirically* determine."

The third paragraph makes very plain the difference between a unit of sense-perception as called object, and the completed object of categorized perception, and equally between the mere succession of apprehension, and that which is named "*in the object*," the latter, of course, referring to what we name completed, or categorized perception. Then it is again insisted on that our objects, as objects of sense, can never be things in themselves. The examples of the house and the ship (to take in paragraph 4) are excellently illustrative, and leave no excuse for a mistake of meaning. The details of impression that constitute the objective phenomena in each case are declared to be equally successions. Nevertheless the succession is such in the one case that the category of quantity acts, and such again in the other that the category of causality must acknowledge the call. Involuntarily here Kant is made to imply that, on the part of the latter succession, it is the fact of its being irreversible that gives *causality* the call, and alone the call, and irresistibly the call. Nevertheless, he will assert, for all that, that any necessity of order can *not* be in sense, and *must* be in the understanding!

"With which object my notion, as derived from the units in apprehension, must agree." Kant's case is so peculiar, that it is sometimes hardly possible for him to avoid a certain confusion of language. The *object* and the *notion*, which are here said to be under an obligation to agree, for example, are precisely and numerically one and the same thing. Certain feelings of my own, in a time and space of my own, pinned together by a category of my own. That to Kant is

an object. Of course, when we differentiate this as though it were, not a mere state of myself, but an independent object, we may conceive ourselves to have two things comparable the one with the other; but still, for all that, they are numerically the same, and there is but one object. The reference here is back to paragraph 3.

The first sentence of paragraph 5 deserves a word. "In this case, therefore, it is from the *objective suite* of the facts that I must infer the *subjective suite* in apprehension; for this latter suite (of mere units in sense) is, as such, quite undetermined, and not discriminative as yet of object from object." This is to the effect that it is *after* objective experience (categorized perception), and not *before* it, that we can tell how it was with the *order* of the sense-units themselves *while still subjective*. But can this be granted? Is it only *after* I have recognised the house, and *after* I have recognised the drifting, that I can tell the units of impression were in the one case coexistent, and in the other consequent? Kant tells us himself that one category is determined at one time, and another at another. He also tells us that the agents of determination are "empirical circumstances." Are we to suppose that these empirical circumstances which determine whether the category of reciprocity shall apply to an A and a B which are coexistent, or that of causality to an A and a B where the latter is consequent on the former—are we to suppose that these empirical circumstances are known to us only *after* formed and finished perception, only *after* categorized experience? In that case, *what* could conceivably determine one category more than another? In short, it is quite evident that the units which call in reciprocity *must* already have an order—an order

fairly given in consciousness—to legitimate the call, just as the units which claim causality must, on their side also, have an order of their own to show for any claim of their own. Kant himself will be found to admit as much—not but that it is evidently a necessity of the bare facts. It is here, however, that Kant finds his very centre escaping from his feet, and that qualms and vacillation result. In the passage immediately before us, as we see, Kant, whether he feels the difficulty or not, is at least found eagerly to grasp to the stereotyped phrase, Synthesis is not possibly an affair of mere sense, and *must* come from the understanding.

By-and-by we have a paragraph which begins by considering the difficulty of the cause and the effect sometimes appearing to be simultaneous. Now the sixteen earlier paragraphs really contain Kant's discussion of the particular interest of causality. Of these paragraphs we have already considered five, and we shall now take the remaining eleven together. As said, they are but repetitions, and very wearisome and unsatisfactory repetitions, of what we have just stated as the "proof." I have, besides, endeavoured to assist the reader, even *in situ*, by certain footnotes. One sees that Kant, all through these paragraphs, is in utter subjection to the single presupposition that all objects are at bottom but modifications of our own subject. But that being so, then his further thought is, were that all, there would be but a random play of the units of impression. There must, then, be laws to order these, and such laws are; but they (these laws) can only emanate from our own intellect. Did we suppose that we attained to a knowledge of these laws only from the experience of them, then such origin would

be manifestly inadequate to their own intrinsic validity: they are apodictic, while any such origin could only extend contingency. I allude in the footnotes to a difficulty in regard to whether time, as time, is an element or not in the virtue of causality. Kant really means no such thing. He speaks for the most part of only *Erscheinungen* in time; and time, if ever for its part alone mentioned, means a filled time. We have always to consider that Kant has never anything before him in this section but the phenomena of event. Kant knows of no peculiarity in time, nor yet of any peculiarity in a category, whereby an event shall be actually "dated." That is but too manifestly absurd. He can neither dictate a *when* nor a *where* for any event; but any event being actually given in its when and its where, then he knows that the cause being, the effect will follow. That *relative* place in time is the only place in time that Kant presumes to refer to a rule. I may note here that, in all the preceding paragraphs, the term *apprehension* having been confined to the subjective stage in perception, would, in the last paragraph of the sixteen, appear to be extended also to the objective stage. There is no real difficulty. I must call special attention, however, to the third sentence of the twelfth paragraph. Kant there, having remarked on the indifference of succession on the part of all units of impression in the first instance, expressly avows that he converts that indifference into the necessity of cause and effect only "*when* he *perceives* or *previously assumes* that in a succession there is a reference of what is subsequent to what is precedent according to a rule." Of course, it may be said that a rule can only come from the understanding; but, in the *Prolegomena*, Kant really finds

himself obliged to allow a rule subjective in priority to the rule objective. In fact, it is only such rule that, from the nature of the case itself, *can* be meant here; and it is impossible to overestimate the importance of the admission that there is a necessity for the "*Wahrnehmen oder voraus Annehmen*" of this rule, in order that there should be determination of the correspondent category to act and substitute its own objective rule.

There follow now twelve paragraphs rather of a miscellaneous nature. What is first taken up in them is the fact that, though in the causal process the effect is empirically recognised by being after the cause, yet there are many cases where the effect and its cause seem at once and together. The room is heated by the fire, but both are together: the one instance will suffice to suggest a thousand others. The solution, of course, lies in this, that the cause is always *dynamically* first, as the effect second. After this Kant proceeds to speculate on the infinitude of parts in the process of change, in the same way as he was seen to be much caught by the degrees in intension. The whole matter, however, is in effect barren, and a mere affair of quantity. Intension, extension, process of change, are all quantities, and, as such, open to an infinite reciprocation of the two moments, discretion and continuity. What concerns derivative categories as action, power, etc., seems sufficiently plain as it stands. I do not think it will be difficult to understand either that, though change can be made conceivable only by actual experience, the abstract process may be capable of general consideration. We are reminded here, too, of a passage under "Anticipations of Sense-Perception" (148), where, on occasion of the collation of extension, intension,

and change, it was said "that the causality of a change at all lay completely outside of the limits of a transcendental philosophy, and presupposed empirical principles." I have no doubt there are students of Kant quite capable of lifting this crumb up and asserting, on the authority of it, that there was not possibly any question of causality in the *Kritik of Pure Reason* at all! And yet the motive principle of the entire business is just to find a solution for the problem of causality. I have certainly heard a student assert of Kant that, in a change of states, it was only the one state he questioned as the antecedent of the other. Kant, however, regarded any two successive states only together as the single thing he called change, and it was the cause of change he discussed ("two things so related that the state of the one conditions a consequent state in the other," II., 185). Of course, that discussion was not of what caused change either generally or particularly; for, as he expressly declares (as well in our present text, 174, as in the accidental reference, 148), "how there can be change, we have *a priori* not the least idea—that requires a knowledge of actual forces only empirically possible;" while the question of "Schöpfung" does not enter here. That discussion was not precisely of the cause, nor yet precisely of the effect, but still it was of the relation between both. It considered not any one cause and not any one effect—not even cause as cause or effect as effect; but only, any one case of cause and effect being, how was it that we held the transition from the one to the other to be necessary. Manifestly there is no such transition in any mere succession of states (of course in the same subject). Then it is plainly the general question that introduces the idea of change as change; and

surely it is quite legitimate to consider the mere general form of change and in its quantitative character; but in this reference our word or two will suffice. It is sufficiently striking that the good Kant can talk of his *a priori* "so much enlarging our knowledge of nature" here.

C. Third Analogy.

This is a short section, and not difficult. The great point, as regards Kant, is simply to see that there is such a thing as empirical communion, and that, to his mind, the necessity which is attributed to the relation can only proceed from a category. This category we actually have. Necessarily, too, the communion which Kant sees is not of a geometrical nature, as of point to point in space, but depends on the dynamical "influence" of factors mutually. In fact, he actually prefers to deduce the "*communio spatii*," the local communion, from a "communion of influence."

The root-difficulty, however, which we have already so often seen, must still haunt the reader here, and not, it may be, in any less aggravated form. We have just had an A B of causality, for example, he may say, in which B could *not* be set before A, and here we have another A B which may quite as well be B A. Does Kant wish us to understand that this difference is due only to the difference of categories? Surely there must be a difference in the facts (the units of impression) themselves to call for this difference of categories; and in that case is not the first difference the vital and determining one, while the second difference can, as surplusage, be really only one of luxury? Kant's answer is, It is one of *dignity*.

The first difference is contingent and subjective; but the second is one of necessity and objectivity, and this is due to the category. But let us look at the text.

"All substances, so far as they may simultaneously be perceived in space, are in thoroughgoing reciprocity." One is tempted to add here, And so far as they are perceived after one another in time, they are under a thoroughgoing law of causality. Therefore it is owing to the differences in the substances themselves that they are now under the one category, and again under the other. So far as words go, Kant's very first sentence here bears this fully out. The reciprocal sequence which is now to be seen under C, is directly declared to have been impossible under B ("welches—beim zweiten Grundsatze—nicht geschehen kann"). It is quite plain that Kant postulates a determining difference in the empirical facts, and that he has recourse to his *Epigenesis* only for the imputation or the imposition of necessity. How else, he seems to say, can you get necessity? For all that, every successive sentence seems simply there to assert that the order concerned is empirical and not intellectual, that it is *ab extra* and not *ab intra*—that, in truth, very palpably and transparently, it is in the facts themselves, in priority to, and independence of, any category whatever. No doubt, in the simple *signs* of things, as in the first instance they merely affect sense (say colours on the retina), there is as yet no notion of an object present; but, in the end, it is not *we* that throw into them that notion of an object. On the contrary, we *recognise* it in them. Two boats collide, and there is action and reaction,—necessarily, too,—but neither the action nor the reaction is due to us. In the presence of such things Kant can only

repeat, Nevertheless it is *we* who, by imputation of a category, introduce necessity. Inexorably shut in to his presuppositions, too—of all objects being at bottom subjective, etc.—it is quite evident that, while he can say nothing else, he is, in saying it, out and out sincere. I may remark that, as may have been observed, here too any objective action on the part of time is carefully eliminated; and again later.

In reference to the general remarks, which follow the asterisks, in regard to Nature, etc., we probably find ourselves saying, No doubt substantiality, causality, and reciprocity are vital laws in it; but they are really *in it*, and it is not *we* who have thrown them in from our categories. Of course, too, when it is said a rule of understanding determines place in time, that place is only a co-*relative* place in the respective association, substantial, causal, or reciprocal, actually empirically given. The categories do not *empirically give*, even should we grant on their part an *epigenesis* of necessary rule. It confirms what has been often said already to see the possibility of experience styled a *tertium quid*, and that *tertium quid* identified with "the synthetic unity of all apperception."

4. The Postulates of Empirical Thought.

All here is quite exoteric and easy to be understood. No one who bears in mind the machinery he has seen will find it difficult to acknowledge that whatever coheres with the possibility of experience *is* possible; whatever with its actuality, actual; and whatever with its necessity, necessary. But then he may say, Possibility, actuality, and necessity are simply facts, and I *recognise* them: if, then, to see them I have just to look at them, why this gratuitous and very idle

assumption of three original, special, and peculiar cells in the mind, expressly there for no other purpose than to enable me to do so? It is very extraordinary how the very aspect of Kant's machinery has proved so imposing to mankind that, after a hundred years, they still remain blind to its reality.

From expressions here, it becomes again quite plain that by the phrase "the possibility of experience" Kant only means his own formal *a priori* conditions of this experience of ours; and these, as we abundantly know, are, with time and space, the categories. It is also no less plain, however, that what I call the *empirical reference* is at the same time fully and fairly in his mind. It is in this connexion that we find him to refer to construction in space. Such construction enables us to give a certain reality to objects, even—space, that is, being taken on the terms of Kant—in independence of experience, but *with* the proviso that they shall be such as to be found in experience. It does not follow from this, however, that the *empirical reference* can be allowed Kant beyond such possible construction *in time and space alone*. It is quite untrue, for example, that we can conceivably construct beforehand out of the *single* monotonous sequence of time *three* such compound schemata for actuality as shall enable us to realize, as it were *only* by empirical *reference*, the three categories of relation. The categories of cause and reciprocity, for instance, are quite opposed the one to the other, the specifically distinctive character of the latter being reversibleness, and equally of the former irreversibleness. Nor has the remaining category, substance, any less its own proper and distinctive difference. It is utterly impossible to throw into the monotony of time the very shadows of three such

differences. If, then, we are to understand that Kant would pretend to proffer a legitimate claim for these, too, surely it will occur to every one to object that, to convert the *empirical reference* into the *empirical instruction*, is *not* legitimate. It is quite possible, however, that Kant would assert his right even to the empirical instruction. I do not deny, he might say, that we have one set of empirical impressions to form a case of substance and accident, or that we have another set to form a case of cause and effect, or that we have a third set to form a case of action and reaction. Nay, on the contrary, my proposition is, that I must be allowed such empirical reference, even under the name of the possibility of experience, if for nothing but to realize my principles. What I pretend to do, he might be supposed to continue, is to explain the presence of necessity in contingency by reason of a certain transcendental epigenesis from the functions of our intellect—an epigenesis, that is, which is *a priori* valid. I do think that this was Kant's own position in the end; but it is still open to every objection, so far as I see, that has been suggested on my part, while probably, also, it is a position which itself has, generally, never yet been explicitly seen. In any discussion of Kant, it ought, I think, to be finally allowed him, however little it may, finally, too, stead him. Empirical *instruction* is *not* legitimate; and without it his categories are, for production of the schemata, incompetent to impregnate or infect time—this, with all the rest. The category, of course, is assumed to represent a universal relation which the empirical intromissions only exemplify; at the same time that it is these latter alone enable the category to get realization for itself: but then it is the having this category, this universal relation, beforehand, which

enables us to predicate necessity of the empirical examples. This is fair statement; but the state of the case remains essentially the same.

As regards what Kant properly means by possibility of experience, we have the unmistakable avowal here that he "omits from consideration everything the possibility of which can only be made out from its actuality in experience," and that he "regards only the possibility of things so far as dependent *on a priori notions*." That is, and the clause which follows makes this plain, the *a priori* notions are the conditions of possible experience, but they accredit themselves when referred to experience. These words again are also, in the same reference, eminently declarative, "At the same time it is true also that, *even without premising experience itself*, we are quite able to discover and characterize the *possibility* of things." Now the possibility of things is "the possibility of experience;" how then does he go on to say we can, even without experience, know "the possibility of experience"? We do this, he says, "merely by referring to the formal conditions quite generally determinative of objects in experience." Then, finally, he adds, "but still, again, only as referred to experience, and within the limits of experience." As regards the important phrase in question, we shall now allow this to be decisive.

It is hardly necessary to avow that, after all that has been said for substance and reciprocity, it is a little surprising to find all necessity of existence referred to causality. If accidents are necessarily due to substance, action to re-action, and re-action to action, it is evident that causality is not, on Kant's own terms, the only source of necessity in existence, unless *its* relation be interpolated into all these relations. And surely the prospective force of causality proper

being once laid down as the single element at work, the idea of the double force of reciprocity, now prospective and again retrospective, ought at least to present to reflection a considerable difficulty. Kant, however, does not even seem to have felt this. It is certainly inconsistent on his part; for why the three if they come all to one?

I dare say there is but little need to refer either to Kant's pretensions to the construction of Nature. Even on his own showing, any such pretensions are at last void. He only claims at last merely fictitiously to *varnish* the laws of nature that already empirically exist. "Nothing is to be admitted in the empirical synthesis which could interrupt or infringe understanding and the continuous unity of all perceptions, *i.e.*, the unity of its notions." Kant's own claims, when, in their regard, he is driven into the definitive extremity, fall far short of that. The empirical synthesis is a business of its own, and it proceeds always without even deigning a look to the understanding. Substantiality, causality, reciprocity, said synthesis possesses of itself, and so far it is a ruled and regulated synthesis. Still, for all that, the reverse is quite as true as the obverse of each of Kant's four propositions here. I, for my part, have no hesitation in saying, *datur* hiatus, *datur* saltus, *datur* casus, *datur* fatum. But even were this not so, and the contrary averments, as on the part of Kant, the only true ones; still such things are in nature not from us or him, but only from itself. To this, of course, Kant replies promptly, Synthetic necessity cannot possibly be *a posteriori*, but only *a priori*. What is concerned here, however, is a matter for separate consideration; in regard to which, indeed, we have already at least indicated the truth, as well as how it was that

Kant (with his presuppositions) was led aside from it.

The speculations which follow in regard to a "field of possibility," "other forms of perception," "other forms of understanding," "other series of objects," "more than one experience," etc., relating all of them to an "absolute possibility" (which is declared no question for us), are at least idle. The term *postulate* is used here by example of mathematics. A mathematical postulate refers to the mind being credited with a power of actual synthesis, which synthesis is at the same time genesis of the notion concerned. So what is possible, what is actual, what is necessary, invites the mind simply to regard a certain correspondent synthesis, when the due notion springs. They (the postulates) can hardly, in any important sense, be called synthetics, however. We turn back for a miscellaneous remark or two.

The postulates can be seen to *restrict* the other categories to empirical use, if we consider that, one after the other, they respectively refer to the other categories, at the same time that they are themselves principles of *empirical* thought, and, as such, relative to questions of existence. The consequent denial to the categories of a "transcendental use" may seem somewhat contradictory when we consider that their very reason to be is their *transcendental reality.* We have only to turn to the paragraph next but one, indeed, to hear of the "transcendental truth" of the categories, which transcendental truth, too, is declared to be nothing less than their "objective reality." Transcendental use, nevertheless, is not exceptively denied only here: it is equally denied elsewhere. On pages 155, 201, 204, there will be found similar express and unmistakable denials of any transcen-

dental "*Gebrauch*" on the part of the categories. It is not difficult to see what, in regard of the various expressions, Kant must have had variously in mind. Still such variety suggests on our part indulgence to Kant in the use of his terms. I, for my part, would have preferred to have denied for the categories a *transcendent* Gebrauch. Of course, it is not at all necessary for us to have Kant's categories in order to understand how absent things may be still actual. There is a very objectionable hide and seek on the part of Kant in special reference to necessity, now as causal, and now as modal. We have, in this section, a strong declaration, too (190), in regard to that determining in the unity of an all-embracing time, etc., which is viewed as an actual "dating." Causal determination is here restricted to "the relation of things," the one as cause and the other as effect, etc.

General Remarks, etc.

The chief reason for this section seems to be the making good of the *empirical reference* even in its extremest form. The section itself is an addition, and not found in the *Kritik* in its first form. I have no hesitation in regarding it as an afterthought. I have examined the text of the first edition, and collected several scores of passages that bear on this question of an empirical reference; but I can find in none of them any examples of such extreme statement as we have here. I suspect Kant now to have his eyes open to the possible failure of his *rationale* in its attempt to account for the principles of relation, and to be grasping, consequently, at suggestions to justify.

That Kant's machinery is only of possible empirical

use, we accept at once and without difficulty. To that extent, then, we grant the empirical reference. We grant the empirical reference, I say, and we are even willing to grant an appeal to actuality in order to effect realization for the principles potentially at work. But then these principles must be perfectly seen to be potentially at work, the moment the realization has been effected. If on withdrawing the realization the principles themselves disappear, then these are not independent of that. Kant's scheme of pure perception was just to enable us to pass beyond mere notions and to have for the realization of these pure matter. Are we to suppose now that pure perception is not enough, but that we must be allowed to *orient* ourselves by an actual appeal to empirical fact? Well, that surely is, by no means obscurely, a very important change of front; but we shall even grant it on condition that, after realization has been so procured, the *a priori* system is seen then quite plainly in its own independent reality of place and function. Should, however, said *a priori* system show to have been, not only illustrated, but actually produced, by the realization, then it will be our right to cancel the term (*a priori*). It is so clear from a thousand intimations that the original intention was, for realization of the categories, only to refer to pure sense, that now we can only suspect an actual empirical reference as *involuntary*—as something, by mere necessity of the case, compelled. The empirical reference, in fact, is seen to have become the empirical instruction. The categories of relation are not only seen, with Kant, to be impossible of realization out of mere notions; but these very notions, and not less their dependent schemata, are seen to be impossible of realization without this that we call empirical

instruction. Kant's own *allures*, and all the more because of their very simplicity, betray the truth here. How very naïve these, "Es ist etwas sehr Bemerkungswürdiges dass," "noch merkwürdiger aber ist, dass," etc.! That reference to "All contingent existence must have a cause," etc., is, on the part of the good Kant, but a simply artful diversion. We do see into such things through mere notions, and it is no objection that we do not know them to dictate to experience, and they would dictate to experience were experience so and so constituted. His reference to space in order to realize action and reaction is surely a saying for the sake of a saying, and very artful is his mixing up of the category of quantity that, for realization, stands in no need of empirical exemplification, with those others that expressly do so stand. Give us but space, give us but time, and we can perfectly realize all that is given to quantity; but give us both—give us a time actual, give us a space actual, and, even with their infinitudes before us, we shall never be able to realize substance and accident, cause and effect, action and reaction.

Appendix.

It may be reasonably thought that, latterly, on the part of the Commentary, there has been criticism, rather than exposition. To amend this, I propose to append here the conclusion, so far, of an earlier analysis; beginning, that is, from B or the second analogy. In writing this out, I shall compare it, paragraph by paragraph, with the original, and should anything suggest itself worthy of further remark, I shall add as

much in footnotes. I shall not be sorry that a specimen of this analysis should be seen, as well as the fact known, that my views then, whether in exposition or critique, were pretty well already fixed. I propose also to include in this appendix whatever I may judge to be of an illustrative nature in the first 93 pages of the *Prolegomena.* I shall probably subjoin, too, under a third head, sundry extracts from other works of Kant, which may seem to me elucidative of what positions, special or general, we have, in the foregoing, seen.

I. Pen-in-Hand Analysis of the Year 1860.
(From *B* to middle of *C.*)

B.

Second Analogy. Principle of sequence in time as modified by the law of causality.[1]—All alterations occur according to the law of the connexion of cause and effect. Proof (already proved that all phenomena of time are but changes or alternating *modi* of substance, which itself is constant. The idea of change just one subject with two opposed *modi*).

I perceive phenomena only in succession, *i.e.*, I connect two or more in time. But nexus holds, not of sense, but of understanding, through imagination. The two states in a sequence may be put indifferently (unless on a law) so far as time is concerned. For time is itself unperceived, so that no empirical determination can flow thence. Still one is first and the

[1] Of course, *my* position is that no mere logical function of intellect *can* modify the sequence of time, even if given pure, into the law of cause and effect as experience in things. "Empirical," that soon follows, is not Kant's ordinary *empirical:* it refers to the suppositiously determining act of a thing-in-itself. Of course, what is in this "analysis," is of little use unless compared with the original.

other second without apparent reason—so far as sense is concerned, they are not objectively related. To effect this objective relation, the one must be thought as necessarily first, and the other as ditto second. But the category—and only a category can do this—the category of causality has just this precise effect. It prescribes the order of nexus—brings it about that we subject all sequence of phenomena, all change, to this law, which is the foundation of experience. As objects of experience, phenomena only possible on this law. [We see here there is not so much induction as dogmatism: we have the category of cause and effect, we have the universal sense-form time; impressions from without must submit to be modified by this *a priori* machinery: one event is seen as cause, the other as effect; the one necessarily first in time, etc. The only reason for the inversion is the *necessity*, not only of explaining, but of possessing *necessity*.][1]

Our subjective modifications successive; but the important point in them is their objective reference. They are not only subjective states, but they take up an objective position. Now, it is the necessary nexus extended to them by the understanding that effects this objectivity. We can pronounce nothing of them as things in themselves. They are successive in apprehension, but receive a mutual nexus in time. Even in the apprehension of a house there is succession, but this is not predicated of the object. The house, though a sum of successive subjective modifications of

[1] The passages in square hooks are comments of the pen-in-hand analyst as he goes on; that is, they are in the original MS., and not added by me now. I add nothing now but by footnote. The *inversion* referred to is the transference of the law of causality from the things themselves to us.

ourselves, comes to be viewed as their object; and with this object the notion I derive from my subjective modifications must agree. Truth being agreement of the idea with the object, the formal or *a priori* conditions of empirical truth can alone be our question here; and the phenomenon, conceived as in contradistinction to the subjective modifications which constitute it, can become distinguished from these as their object, only if it stand under a rule or law, which distinctively characterizes it in opposition to all others, and renders necessary a certain mode of uniting into the unity of an object the complex of its details. The condition of this necessary nexus is that in the phenomena that constitutes the object; or that in the phenomena which constitutes this condition is the object. [The subjective modification of sense, then, not the object: the ingredients derived from the *a priori* of sense and understanding constitute the object.][1]

To perceive a new state, a former other state is presupposed; for a state following an empty time is as unperceivable as this latter itself. The event, then, follows some other. But this following is common to all apprehension (as in the house), and there is no principle of distinction so far. But now the first is seen to be necessarily first, and the second necessarily second. The boat drifting down a river cannot reverse its successive *loci*. The *ordo* of these

[1] The above paragraph is, in the first edition, the first. In that edition, too, the second analogy was called "*Grundsatz der Erzeugung;*" and the initial proposition ran thus: "All that happens (begins to be) presupposes something whereon it follows *in obedience to a rule.*" Beginning to be, actual genesis, Kant found, evidently, not to answer. The category, with time alone, would, certainly, have been more glaringly unable to account for causality, were cases of causality to be regarded as actual originations.

is fixed. First and last is indifferent in the house, but here absolutely fixed.

The subjective sequence (otherwise quite indeterminate) is to be inferred from the objective. The nexus of first discretionary. The second depends on a rule. Only on such rule can I have authority to prescribe the succession as objective to the succession as subjective while still simply in apprehension. [All this particularly puzzling to common reader, as to him all that Kant states plainly proves the relation of cause and effect to depend on what comes *ab extra*, and not *ab intra*. Kant's argument is this: We only know appearance to sense, and appearance to sense can be subjected to law only from within; that it is so subjected is evident from the element of necessity which obtains in it—an element impossible to be derived *ab extra*, for elements *ab extra* always are, and can only be, contingent.][1]

[1] The reader may now, quite legitimately, take it for granted that he has the whole case before him. All lies in the first three paragraphs of the first edition. "Apprehension" is explained as "Aufnahme in die Synthesis der Einbildungskraft." Then "das Mannigfaltige der Erscheinung ist jederzeit successiv." From this it is plain that the Mannigfaltige of the Erscheinung is the complex in sense, the units in the breadth of a sensuous impression. Now that Mannigfaltige, these units are taken up in apprehension successively. All is as yet subjective, but the question is, how will it be when the subjective impressions differentiate themselves and stand apart from the mind as a single actual object? Then he goes on to say that the object may be such that its units are all together in time, and not after one another, as in the house, or again that the object may be such that it exhibits even objectively a succession in time, that is, a necessarily irreversible succession in time, as in the boat. And here Kant will impute all such difference to the influence of a categorical rule, while the puzzled reader feels that all difference concerned was only due to the difference of the transcendental objects themselves. "The question is now: whether the units of the house itself are also in themselves successive, the one to the other, which, of course, no one will admit. But, again, directly I raise my notions of an object into the transcendental sense, the house is not a thing in itself but only an *Erscheinung*, that is, impressions of sense whose transcendental

The antecedent determines the consequent, and not *vice versa.* No event goes back from subsequent to previous time; still it refers to what was previously. But the antecedent being given, the *progressus* is forwards.

The subjective succession of apprehension insufficient to the objective. This, were it only that, would be mere sport and confusion, etc. For a connected sane experience, then, a rule of nexus is absolutely necessary.

If consequent not (on a law) referred to an antecedent, I could not assert a sequence *in the object.* This law, then (of derivative consequent), enables me to make my subjective synthesis objective; and only on such presupposition is the experience of occurrence or event possible.

This opposed to the ordinary derivation of the notion cause from a comparison and induction of actual experience. But were its origin so (*i.e.*, empirical) it would be of a contingent nature, as contingent as the experience itself; there could be no element of universality and necessity present. Such necessity, etc., would be merely assumed (as in an induction). Like others the like (as space and time), we get these from experience because we ourselves had previously placed them in experience, and in this way even rendered it possible. The logical clearness of the rule and principle is, of course,

object is unknown." It is important to know thoroughly what these words mean, Apprehension, Erscheinung, Mannigfaltiges, Transcendental, etc. For the second, phenomenon can be used, and is used by Kant. The unknown object of any perceived object is rather *transcendent* than *transcendental*, but it is transcendental so far as it is supposed actually to operate in experience. To give my notions of an object their transcendental sense, is to see that, materially, we have only to do with our own sensuous affections. Evidently, we have to be indulgent with Kant in the use of his terms.

only possible after experience, but dependence on it (rule, principle) as condition of synthesis in time was the foundation of experience itself, and preceded it *a priori*. [This a lucid paragraph.]

Could not predicate such nexus in experience without such *a priori* principle: apprehension were merely subjective, and without distinction, else. We are compelled, etc.

Impressions are only modifications of our subject. How do we give them an object? How, by addition to the subjective reality as modifications, do we attach to them an objective reality also? Reference to another impression or idea (outward object) insufficient, for how does that again transcend its merely subjective nature (as affection of our own)? The new condition and dignity derived by our impressions from this objective reference indicate the production of a certain necessary collocation into unity on the part of our impressions, and their reduction to rule. And, on the other hand, our impressions obtain an objective character because there is in them a necessary order in relations of time. [How important it is always to bear in mind that we know only the inward affection, which, being inward, must receive all further elaboration *ab intra*. An outward cause of impressions is assumed, but not the slightest idea can be formed of its nature.][1]

[1] The hooks have simply got hold of the truth. If what Reid calls the "ideal theory" is true, then Kant, who professes nothing else, must be admitted to be, on the whole, right. If the material elements of things are only successive units of subjective impression taken up in sense, and if sense must distribute these units only indifferently into two mirages within us called space and time, then any rule in these successive units can only come from within. It shall be the influence of such *ruling*, consequently, that raises these subjective units into the objective things of the cosmical whole. Of course, that is the bother all

In apprehension the particulars are successive, but —in so much general and common apprehension— there is no object, for no one is distinguished from the rest. But relation in sequence to an antecedent on which, in virtue of a law, a consequent follows— this attained, then there is something that presents itself as an event, an occurrence. Then there is a necessary time-order. In the idea event, then: 1st, an antecedent (determination of something to exist in virtue of something in a time in which it was not). The antecedent contains the condition, in virtue of which the consequent always (*i.e.*, by a law) follows. Hence, 1stly, cannot reverse the series; and, 2dly, the antecedent being given, the consequent *must* follow. So, order in our ideas: the present state refers to the past as indefinite correlate, determinative, however, of the former, and uniting it necessarily with itself in the sequence of time.

Former time (as filled) determines later time necessarily, the latter being reached only through the former: this a formal condition of all perception. Therefore the empirical perception has a like law. Former phenomena determine later. For only on occasion of phenomena is this continuity of time and times empirically perceived.[1]

To experience understanding necessary, not for clearness, but for possibility. Here understanding imposes time-order on the phenomena, assigning a sequence of antecedent and consequent, without which

along, that the reader's *feeling* is constantly giving the lie to the necessity in the causal sequence not being in the impressions themselves.

[1] This paragraph seems so to refer to time as time, that a mistake were venial. The first words, however, contain the necessary correction. What is concerned is "a formal condition," not of time as time (though that is true too), but "of all *perceptions*."

there were no agreement with time, the order of whose parts is *a priori* established. This is not in consequence of a reference to absolute time itself—*that* is not perceivable; but inversely phenomena must determine their own time-sequence, the antecedent in virtue of a law determines the consequent, and a series results, which (by understanding) produces the same order and continuity in all possible perceptions as is found *a priori* in the form of inner perception (into which all must come). [Understanding reduces phenomena (the units of impression) to the order of time by the law of causality.][1]

The phenomenon becomes *real* (when assigned its place in time), *i.e.*, an object which by virtue of a law can always be found in its place relatively. The law is: that, in the antecedent, is the condition determinative of the consequent. Thus, the principle of a sufficient reason is the foundation of experience, or of the objective knowledge of phenomena with regard to their mutual relation in the sequent series of time.[2]

Moments in said principle: Apprehension of ima-

[1] The hooks, again, contain the whole truth here. Time is not an absolute object. Were it such, it, of itself, would determine everything that might be in it. Time is only a mirage of general sense. Units of impression, then, are, in the first instance, uninfluenced by time. They present themselves in us indifferently *timeless*. It is the *law* (of the categories) determines them into the order of time itself, for, though a mirage, it has an order. There is no determination into time till a category acts. Time itself determines not. Think, then, of the mess made by that "unity of an all-embracing time!" Of course, the units being then timeless, it is inconsistent on the part of Kant himself to call them, even in the first instance, a "succession."

[2] It must be borne in mind that the "phenomena" under this section are always such as go to make up a case of causality. No other phenomena are ever meant here as being reduced to the order of time itself (a first that is first and a second that is second, irreversibly). It is certainly only causality that does this; but that only in its own case. To mistake this is, with Schopenhauer and others, to make only one category of the twelve, objective.

gination successive. So far no determinate order. But the order *becomes* determinate (objective). There is an empirical judgment assigning the consequent to the antecedent; otherwise mere subjective *Spiel*. The law of causality, then, conditions the objective validity of our empirical judgments in regard of events in experience. The principle of causality in the succession of phenomena, therefore, operates for all objects of experience (under condition of succession), because it is itself the ground of the possibility of such an experience. [If the mere indifferent succession of our units of sense-impression exhibits law, that law, as neither in these units from themselves, nor yet from time, can only come from the understanding, from a category. Were the law not necessary, there were in said units mere subjective sport.]

(What follows of *B* seeming unimportant, I withhold the relative notes and pass on to *C*.)

Third Analogy. Principle of simultaneity on the law of reciprocity or community.—All substances, so far as they can be perceived together in time, are in constant relation of reciprocal action. *Proof.*—Things simultaneous if, empirically, the perception of the one can follow the perception of the other interchangeably (not as last). Moon and earth. Time cannot itself give us this. The synthesis of imagination says only the one, in apprehension, is in the subject now, the other again, and *vice versa;* not that they are simultaneous, or that their simultaneity is necessitated by their interchangeable position in the sequence. Consequently, a notion of understanding is necessary in order to say that the mutual sequence is in the object, and that the simultaneity is objective. But the relation of reciprocal influence is that in which substances exhibit *modi* interchangeably attributable to each other

as ground or cause, and is a notion of understanding. Therefore the simultaneity of substances in space cannot be otherwise known in experience than on the assumption of mutual reciprocity. This a condition of the possibility of things as objects of experience. [Next paragraph seems to imply that, to come under the law, the things themselves have transcendental peculiarities to qualify or render them eligible—is not this the assumption of transcendental principles *ab extra?* This must be so, indeed, or the application of the categories would be itself confused and indeterminate. Kant, perhaps, would call this no objection: he would say, it is so, but still the empirical sense-units are contingent, and we can ascribe necessity to them only so far as they cohere with necessary *a priori* principles of the understanding. But, in this case, it would, after all, be no more than a transcendental necessity *ab extra* coinciding with a transcendental necessity *ab intra*, and the theory would no longer consist of a contingent *a posteriori* fashioned cosmically by a necessary *a priori*. There is a diversity in the application of the categories; the one is now in use, and another again: there must, therefore, be something *ab extra* that gives the hint when this one shall come into play, and when that one. In short, there must be transcendental peculiarities in the *a posteriori* matter of a necessary kind, wholly independent of us. This necessity in the *a posteriori* construction simply corresponds to, and coincides with, the necessity of the *a priori* construction; and we are back again in the very middle of the pre-established harmony.] This paragraph states the criterion of simultaneity; and that criterion proves to be the peculiarity of the *ordo*. [This, then, implies a peculiarity in the manifold itself that calls for the

law of reciprocity (say), and not for that of causality.] If the items of the manifold were isolated and relationless, simultaneity would be no object of a possible perception; and the existence of the one could conduct, by no path whatever of empirical synthesis, to the existence of another. For, though there might be successive perception of isolated objects, there could be no criterion of whether they were *objectively* consequent, or, in point of fact, objectively at once. [Still it is manifest that there is an objective peculiarity determinative of the assertion—which it shall be.] [No doubt, Kant sees this; but he simply says, what that is, we don't know; what *we* know is that we translate it into a law of the understanding.—In this way we have a sort of rationalized pre-established harmony.]

Besides mere existence there must be something determinative of their mutual position to time, whereby we declare their simultaneity. But causality determines place in time, and simultaneity is possible only through each being at once cause and effect. Dynamical community the condition of simultaneity. If they are to be known as simultaneous, they must be seen to be mutually operative; for unless so, they would be isolated, and no connexion, one way or the other, could be predicated. But such mutual determination being seen, then they are together. This, then, that renders such experience possible, is necessary; and all objects that are simultaneous must be subject to this necessity. The experience impossible without such and such, therefore, conversely, all objects of experience fall under such and such.

Communio and *commercium*. The *communio localis* or *spatii* unknowable without the *communio dynamica*. This continuous influence necessary to lead our

thought from object to object. It would be a fragmentary and interrupted experience else.

Subjectively, all must be a whole under apperception. Objective reference of this renders it necessary that the one perception should condition the other in order that the subjective succession of apprehension should not be predicated of the objects, but that these should be known as simultaneously existent. This, then, a real commerce. The three dynamical relations (on which all others found) are those, therefore, of *inherence*, *consequence*, and *composition*.

(What follows is from a pencilled summary of similar date.)

Transcendental reason, why dialectic? As *transcendent*, etc. Kritik here to prevent *lapsus judicii*. In transcendental judgment both *regula* and *casus* : hence the fundamental or primary synthetic propositions or judgments. A canon for, a *doctrine* of, judgment. Categories and sense-conditions make schemata. [Judgment subsuming objects under these gives rise to fundamental judgments.] The empirical intention of all, but can only act through these sense-forms. [The inferrible subjective conditions, without which such an experience as we possess were impossible.] [In apprehension (sensation) as such, there are differences, but that they are differences *in time* can only be *our* doing—the transcendental object that so acts on us, unknown, etc.] How know things-in-themselves *through forms*, which *must* modify? [Succession of time to be viewed always as time filled; then the filling called *change* is so and so that such rule acts—cannot invert the succession.] [Simultaneity of *changes*—not merely of objects. Subjectively, this change is now, that again, and also that now, this again; but this subjectivity is converted into objec-

tivity by the peculiar inferential function of the disjunctive judgment.] [Kant in these compound relations, must admit a subjective construction which brings in an element from without? He only insists on the necessity of the conversion of the subjective into an objective construction.] [There are the empirical peculiarities, but without the notions they would be successive and isolated: it is the notions convert succession into objective this and that. The notion must be seen to prescribe the time-relation. The notion, on such and such subjective successions (which as such only isolated and individual), is seen to connect them objectively in time. The phenomenon change we translate into cause and effect.][1]

[1] These notes will show on the part of the student an anxiety to find Kant right, but, on the whole, whether negatively or affirmatively, a mood of mind which the reflection of the twenty years subsequent to the writing of them has only widened, deepened, completed, and confirmed. Suppose we look, for a moment, at the first sentence under the "Proof" for reciprocity. Translated, it runs thus :—

"Things are together, if, in the empirical presentment, the perception of the one can mutually follow the perception of the other (which cannot take place in the time-relation of objects as exhibited under causality)."

Evidently, the subjective state that precedes entrance of the category of reciprocity must be very different from that which precedes entrance of the category of causality. The latter must have shown units of impression which could only be A B ; while the latter must have shown others which, in their turn, could be A B and B A at once. Surely a relation that was at once prospective and retrospective could not be determined by the same antecedents that determined a relation prospective only. The facts here are more glaringly put in the first edition :—

"Things are together, so far as they exist in one and the same time. By what do we know, however, that they are in one and the same time? If the order in the synthesis of the apprehension of this particular manifold is indifferent, that is, can go from A, through B, C, D, to E, *or*, contrariwise, as well from E to A. For were the synthesis in time an after-one-another (were it in the order beginning from A and ending in E), it would be impossible to begin the apprehension in the perception from E and proceed back to A; for, as belonging to past time, A could not be any longer an object of apprehension." This needs no comment.

II. From the Prolegomena.

There are scholars to whom the history of philosophy is itself their philosophy. III., 3.

There are no sure weights and measures for them in order to distinguish solid insight from shallow prattle. 4.

I was far from giving ear to Hume in his conclusions, which arose simply from the fact that he put his problem to himself not in its totality, but only hit on a part of it, which, without drawing the whole into consideration, could lead to no solution. 9.

This deduction—was the hardest thing that could ever possibly be undertaken in aid of metaphysic. With it, I have succeeded in determining at last the entire system of pure reason, and that, too, according to universal principles. 10.

How is it possible, said Hume, that, if a certain notion is given me, I can pass beyond it, and connect with it another, which is not at all contained in the former, and that too as though the latter *necessarily* belonged to it? 30.

The entire transcendental philosophy, which must necessarily precede metaphysic, is itself nothing else than simply the complete resolution of this question. 32.

Here now there is a great and authenticated science, which, already of an admirable extent, and with the promise in it of infinite expansion in the future, brings with it a certainty out and out apodictic, that is, an absolute necessity,—a science, therefore, that rests not on any empirical grounds, but is a pure product of reason, and that, too, at the same time that it is

thoroughly synthetic: how now is it possible for human reason to bring into existence such a science, and entirely *a priori?* 35.

These notions require, in order to procure them meaning and sense, a certain employment *in concreto*, *i.e.*, an application to some perception (Anschauung) or other, whereby an object of them were given them; but how can perception (Anschauung) of the object precede the object?

Were it necessary that our perception should be such that it exhibited to us things as they are in themselves, then perception were never *a priori*, but always empirical. For what forms part of the object in itself, I can only know when it is present to me, when it is given to me. And then, too, it were all-incomprehensible, to be sure, how the perception of a present object should enable me to know it as it is in itself, inasmuch as the qualities of it could not possibly migrate, as it were, and pass over into my consciousness. But even admitting such possibility, any such perception, even then, could not be *a priori*, —could not possibly take place, that is, *before* the object were actually given to me; for without this it were impossible to conceive any ground for the referring of my consciousness to this object—unless inspiration, revelation. There is only one way, therefore, in which it is possible for my perception to precede the actuality of the object and so realize an *a priori* perceptive cognition: said perception, namely, shall be nothing else than that *form* of sensibility which, in my subject, precedes all actual impressions whereby objects might affect me. 37.

It is only by the *form* of sensuous perception, therefore, that we can *a priori* perceive things; but so we shall be able to know objects only as they are capable

of appearing (*erscheinen*) to us (to our senses), and not as they are in themselves.

Time and space, now, are these perceptions, or perceptive sense-forms. 38.

What I say is this: there are given to us things as objects of our senses, that are external to us; but of what they may be in themselves, we know nothing. We know, indeed, only their *Erscheinungen*, *i.e.*, the *Vorstellungen* (ideas, affections) which they operate in us by affecting our senses. I admit, with all assurance, that there are bodies outside of us, that is, things, which, though completely unknown to us as concerns what they may be in themselves, we know through the affections, the consciousnesses, operated in us by their action on our sensibility (our senses). 45.

Experience tells me what is, and how it is, but never one whisper that it *necessarily* is and *cannot be otherwise.* [The inference is that every apodictic synthetic must, let it appear wherever it may, as theorems in mathematics, or axioms of causality, reciprocity, etc., in daily life, be *a priori*, and have its seat in the functions of the understanding, the logical forms of judgment.] 54.

The subjective laws under which alone an empirical perception of things is possible, hold good of these things as objects of a possible experience (not of course as things in themselves, which is no consideration here).

The conditions under which alone an experience, in regard of them, is possible. 56.

We shall have to do here, consequently, only with experience, and the universal, *a priori* given, conditions of its possibility.

We must, in the first place, remark, therefore, that,

though all judgments of experience are empirical, or have their ground in direct perception of sense, it does not follow from this that, conversely, all empirical judgments are judgments of experience, but that, in addition to what is empirical, and generally, indeed, in addition to what is given in perception of sense, there must supervene special notions which have their origin wholly *a priori* in pure understanding, under which notions every perception of sense must be subsumed, and then thereby converted into experience. 57.

Empirical judgments, so far as they have objective validity, ARE JUDGMENTS OF EXPERIENCE; *those, again, which are only subjectively valid, I name mere* JUDGMENTS OF SENSE-PERCEPTION.[1] The latter require no pure notion of the understanding, but only the logical connexion of the sense-perception in a thinking subject. The former, however, always require, in addition to the units presented in sensuous perception, *special notions a priori generated in the understanding* which just make it that the judgment of experience is objectively valid.

All our judgments are, in the first instance, mere judgments of sense-perception; they are valid merely for us, that is, for our subject, and only afterwards do we give them a new reference, namely, to an object, which reference, we take for granted, at the same time, is to be valid for us, and equally so for all

[1] The italics and small capitals are Kant's own. When Kant permits himself to use the word judgment in reference to the succession of sense-units in perception, while still subjective, he is attempting to meet the objection of a transcendental necessary order already present in the contributions of sense, precedent to, and determinative of, the action of a category, but, in reality, only contradicts and stultifies all his own principles, and even his single object: for what has Kant himself declared a judgment to be? *Verbindung, ordo!*

others. For when a judgment is congruous with an object, the judgments of all men in regard to the same object must mutually agree. The objective validity of the judgment of experience, consequently, means nothing else than its apodictic validity, its necessary and universal validity. But, conversely also, should we find cause to regard a judgment as apodictic (which never depends on the sense-perception, but solely on the category, under which the sense-perception is subsumed), we must regard it also as objective—as expressing, namely, not merely an affair of sense-perception in a subject, but a character of the object. For there were no reason for the judgments of others necessarily to agree with mine, did not such reason lie in the unity of the object to which all these judgments referred, and with which—necessarily all agreeing, consequently, among themselves—they must agree.

Objective and apodictic validity are therefore convertible expressions; and though we know not the object in itself, still, when we regard a judgment as universal, and consequently necessary, we understand that to constitute objective validity. The object (let it remain, as what it is in itself, always unknown to us) is perceptively cognised and recognised by us through such judgment, operating, as it does, the universally valid and necessary connexion of the perceptive units given in sense. And, inasmuch, consequently, as the case is the same with all objects of the senses, judgments of experience will derive their objective validity, not from the direct cognising of the object (for this is impossible), but merely from the condition of the universal validity of the empirical judgments, which validity, as said, depends, never on the empirical, or, indeed, sensuous conditions, but on a pure notion of

understanding (a category). The object, as object in itself, remains always unknown. So soon, however, as the connexion of the impressions (which are given by the object to our senses) is recognised as universally valid, then the object is by means of this relation recognised, and the judgment is objective. 58, 59.[1]

We shall illustrate this.

I willingly admit that these examples (which follow) do not represent such judgments of sense-perception as could ever become judgments of experience, were even a category added to them, because they refer only to feeling, which everybody knows to be merely subjective and never capable of being referred to the object: these judgments, therefore, never can become objective. I only wish for the moment to give an example of the judgment that is merely subjective, and brings with it no ground of necessary and universal validity, and of reference thereby to an object. An example of the judgments of sense-perception, which, by addition of a category, become judgments of experience, will follow presently.

That the room is warm, sugar sweet, wormwood bitter, are judgments merely subjectively valid. I do not require that I always, or equally every other, should find the case to be just as I find it now. These judgments express only a reference of two sensations to the same subject, namely myself, and that too only in my state of sense-perception for the moment. They are not, therefore, supposed to hold valid of the object. Now these I name judgments of sense-perception. Quite otherwise is it situated with

[1] On page 58, line 17 from bottom, there is an "alle Urtheile," which I have translated as if it were *Aller Urtheile*. I think the sense will justify the change; but the "Anderer Urtheile," line 5 from bottom, will probably prove definitively convincing.

the judgment of experience. What, under certain circumstances, experience tells me, experience must always tell me, and equally everybody: its validity is not limited to the subject or the momentary state of the subject. Hence I pronounce all such judgments to be objectively valid. For example, if I say the air is elastic, the judgment involved is, in the first instance, only a judgment of perception: I refer two sensations in my senses only to each other. But shall this judgment be a judgment of experience, then I require that the connexion in question shall stand under a condition such that it will become universally valid.[1] My meaning is, therefore, that I, and everybody else as well, must, in the same circumstances, always effect necessary synthesis in the sense-perception in question. 59, 60.

We must, therefore, analyze experience, in order to see what this product at once of sense and understanding implies, and how the judgment of experience is itself possible. We have first the perception in my consciousness, that is, the sense-perception (*perceptio*), what is merely given in the senses. But, secondly, there is also the judging (which is to be ascribed to the understanding only). This judging now is capable of being double: firstly, in that I merely compare the sense-perceptions, being simply conscious of my state at the time; or, secondly, in that I syn-

[1] Let the reader pay particular attention to the phrase "a reference of two sensations to the same subject," as applicable to sugar-sweetness, wormwood-bitterness, etc., and equally to the other phrase "I refer two sensations in my senses only to each other," as applicable to air-elasticity. Kant accidently hits there in passing the essential and decisive distinction; but he only accidentally hits it there in passing. He makes nothing more of it; I have not seen that he ever again mentions it. The two differences only suggest themselves in passing, and are no more thought of. The latter of them, indeed—the important one—is thrown off with an "only."

thetically unite them in an act of consciousness generally. The former judgment is one merely of sense-perception, and so far has only subjective validity: it is a mere connecting of the sense-perceptions in my own sentient state without reference to an object. Hence, for experience, it is not enough, as is commonly supposed, to compare sense-perceptions and connect them in a consciousness by means of an act of judgment: there is not given thereby the universal and necessary validity of the judgment on account of which alone there were objective validity and *experience*.[1]

There must still be a quite other judgment advanced before sense-perception can become experience. The given perception must be subsumed under a notion which determines the form of judging generally in regard of perception, connects the empirical consciousness of this latter in an act of consciousness universally, and thereby procures the empirical judgments universal validity. Such notion is a pure *a priori* notion of the understanding (a category), etc. 61.

Now, before a judgment of perception can become a judgment of experience, it is necessary that the sense-perception should be subsumed under a category. For example, the air falls under the notion of cause, which notion determines the judgment on the air in regard of expansion as hypothetical. Or, to give a more conspicuous example: When the sun shines on a stone, this latter becomes warm. This judgment is a mere judgment of sense-perception,

[1] Kant may be often heard saying, that, "to compare sense-perceptions and connect them in a consciousness by means of an act of judgment," *is*, "for experience," quite "enough." What makes him say the opposite now, is that he is thinking only of what he calls his "subjective" judgment.

and contains no necessity. I may have ever so often, and others may have ever so often, perceived the circumstance: the sense-perceptions find themselves only usually so connected. But if I say the sun warms the stone, then there has added itself to the sense-perception the category of cause as well, which uniting the notion of the heat *necessarily* with that of the sunshine, the synthetic judgment becomes apodictic, consequently objective, and from a perception of sense converted into experience. 61, 62.

The judgment of experience must, to the sense-perception, and its logical connexion in a subjective judgment (when, through comparison, it has been made *universal*), add something which determines the synthetic judgment as necessarily and universally valid. What this is can be nothing else than that notion which presents the perception as, in regard of one form of judgment rather than another, determined in itself. Said form of judgment, again, is a notion of that synthetic unity of perceptions which can be expressed only by a given logical function of judgment. 65, 66.

When I say, experience tells me something, I always mean only the sense-perception which lies in the experience; *e.g.*, that, on the shining of the sun on a stone, heat *always* follows.[1]

These concern the possibility of experience (of which the units of sense-perception constitute the matter only, not the form)—concern, that is, certain

[1] The reader will please to observe the above "always," and also the "universal" in the paragraph immediately preceding. Kant undoubtedly intimates, in such expressions, that the effect of the mere "subjective judgment," of the mere "logical comparison," is, after all, to determine an "always" and a "universality" in the sensations themselves before a category *can* act.

synthetic propositions of apodictic validity which, as in judgments of experience, constitute the ground of the distinction of these from mere judgments of sense-perception. 71.

Logic gives me *a priori* the form of antecedent and consequent. There may, possibly, now, in a perception of sense be found a rule of relation which declares that on a certain impression of sense another (but not conversely) constantly follows; in which case I have reason to apply the judgment of antecedent and consequent, and, for example, say, when a body has been long enough in the sun it becomes warm. 75.

The notion of cause contains a rule, according to which from one state another necessarily follows; but experience can only show us that often, and, when it rises high, commonly, on one state of things another follows, and can extend, therefore, neither rigorous universality nor necessity. 80.[1]

III. From the Logic.

These rules may be understood, therefore, even *a priori*, that is, *independently of any experience*, because, *without distinction of objects*, they contain merely the conditions of the exercise of understanding, let it be *pure*, or let it be *empirical*. And from this it follows at the same time that the universal and necessary rules of thought generally can concern solely its *form* and nowise its *matter*.—This science—of the mere form of thought—we name Logic. III., 171.

[1] These last two extracts, though contrasting in strength, and Kant is seen to vacillate in them, shed unmistakable light on the fact that, already in the received elements of sense there must be a certain conviction of universality, which the category can only *apodictically varnish*.

The question in Logic is not, how we think, but how we must think. 172.

All our cognitions are either *perceptions* (*Anschauungen*) or *notions* (*Begriffe*). The former have their source in *sense*—the faculty of the perceptions; the latter in the *understanding*—the faculty of the notions. 200.

All *Begriffe* given empirically or *a posteriori* are called *Erfahrungsbegriffe;* those given *a priori*, *Notionen*. 272.

A judgment of sense-perception is merely subjective; an objective judgment from perceptions is a judgment of experience. 296.

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"These admirable lectures upon the Philosophy of Law are not given to the public for the first time in the present volume. Originally delivered before the Juridical Society of Edinburgh, they were published in the 'Journal of Jurisprudence' in the four first months of the current year. From thence they passed into the pages of the 'Journal of Speculative Philosophy,' and are at the present time, we have reason to believe, being reprinted in book form in St. Louis, Missouri. . . . It is satisfactory to find one work which is really valuable, highly thought of—to find that a book, which is in every way admirable, has a real marketable value, and has found favour in the eyes of publishers both in this country and in America. . . . Further, in the work before us Dr. Stirling 'falls foul' of Whewell, and shows not only his ignorance of German, but his incapacity for

the criticism of Hegel, which he so gratuitously undertook ; and, at the same time, he deals summarily with Mr. W. R. Smith, who thought to prove that Hegel had attempted to 'establish the calculus on a new and very inadequate basis.' . . . As against Whewell, he is vindicating Hegel against a mistaken belief that the great German had really tried to throw discredit upon Newton's law of gravitation, and on the mathematical proof of Kepler's laws in the 'Principia;' and that, as correcting the errors of Mr. W. R. Smith, he is vindicating the *metaphysical* position of Hegel in reference to the calculus, and that everywhere and always he is simply *philosophical*. . . . The mistake which has been made by Whewell, Smith, and the rest is just this : Hegel never did profess to find fault with any one received physical principle ; he neither thought of substituting a mathematical proof of Kepler's laws for that which had been offered by Newton, nor did he think of attempting to establish a calculus upon a new basis. . . . His work was not with physics as physics, but with metaphysics as such. . . . His objections are never mathematical, always metaphysical. . . . The incompetence of such men as Whewell and Smith to deal with the questions which Hegel had in hand to answer is remarkable, and is pointed out with much skill and intense force of reason and expression in these most able vindications. No vindications could be more satisfactory.

". . . We may say that one of Dr. Stirling's greatest merits is his admirable power of statement of creeds. Nothing could be better than his statement of the contents of Kant, contained in his article in the October number of the 'Fortnightly Review' ('Kant refuted by dint of muscle'). Here, in the first of these lectures upon the philosophy of law, we have equally good accounts of Kant and Hegel in their relation to each other. These statements, which only extend over a couple of pages, are the rich results of years of labour. . . . In no relation does the consciousness of Dr. Stirling's power force itself more resolutely upon us than in connection with these pithy expressions. . . . Hence we have that marvellous system, which is so admirably rendered by Dr. Stirling in these lectures into the most compact and crowded English. . . . One thing we wonder at, and that is how Dr. Stirling has been able to convey so much in so little. . . . We fear that we have done but scant justice to Dr. Stir-

ling's very admirable work which lies before us. . . . We hope that we have said enough to convince our readers that this work is worthy of the most careful attention and untiring study. . . . We must here quit the subject with an expression of our deep sense of indebtedness to Dr. Stirling for work which he alone in this country, nay, even in Germany itself, was capable of doing. That it has been done with care, with thorough metaphysical ability, and with genius, we are happy to be able to report, as we were previously prepared to expect. Dr. Stirling is our greatest—almost our only great metaphysician."

Telegraphed to Scotsman by its London Correspondent.

"Dr. Hutchison Stirling's new work was published to-day. . . . This chapter, though a short one, is very incisive. . . . Each point of attack is taken up successively, and vigorously assailed. . . . Here the renowned Hegelian philosopher appears in his might, and the manner in which he lays about him is indicative of the intellectual giant in the world of metaphysics."

LONDON : LONGMANS & CO., PATERNOSTER ROW.

V.

ADDRESS ON MATERIALISM.

From the Newcastle Chronicle.

"The students of philosophy who are familiar with that profound work, *The Secret of Hegel*, will be pleased with a *brochure* just issued by Blackwood & Sons, being an Address to Medical Students on 'Materialism,' etc. It contains, besides much beautiful writing, one of the most acute and powerful assaults upon the Darwinian hypothesis of 'Natural Selection' which has yet been published."

VI.

Eighth Edition, Crown 8vo, Price 6s.

SCHWEGLER'S HANDBOOK OF THE HISTORY OF PHILOSOPHY.

From the London Review.

"Those who are acquainted with the other works of Dr. Stirling will be disposed to congratulate Schwegler on falling into such good hands. It will be difficult to mention any one in England so well versed in the philosophy of Germany, from Leibnitz to Hegel, as the translator of this Handbook. Dr. Stirling is also a man of independent thought, fearless judgment, and a metaphysical appetite, that enjoys with the keenest relish the heavy and somewhat unpalatable systems of German speculation. The subtleties of thought and expression in which Berlin professors delight are quite to our translator's taste. . . . It would be hard to praise the Handbook too highly, and we hope to hear that within a short period it has taken the place of Lewes and Renouvier in the hands of our young philosophical student."

From the Glasgow Daily Herald.

"We should hardly call a book of this character here by such a modest name as a 'Handbook,' because handbooks, especially handbooks of philosophy, are generally of the most meagre and trashy description. The student, however, will find this little history of three hundred and forty pages crammed full of information, systematised, and clearly expounded by a mind that took in the whole range of philosophy at a glance. . . . Dr. Stirling, whom we do not now hesitate to call the ablest metaphysical writer we have in Scotland, says that to the student of philosophy Dr. Schwegler's History is indispensable; and we believe he is correct. We do not know any other work where such a comprehensive view of the long life of philosophy, from Thales to Hegel, is to be found."

From the Courant.

"Mr. Stirling has done good service to the student of philosophy by translating Dr. Schwegler's admirable and excellent little Handbook."

From the "Revival of Philosophy," by Dr. Ingleby.

"Schwegler's 'Handbook' is not only indispensable, but sufficient. . . . The annotations by Dr. Stirling are fully as important as the text of the work, and are almost of equal bulk. . . . Apart from Hegel, that splendid work (the 'Secret of Hegel') affords the only trustworthy English commentary of Kant."

From "Pedagogics as a System," by Professor Rosenkranz.

"The Germans are fortunate, in consequence of their philosophical criticism, in the production of better and better textbooks, among which may be mentioned Schwegler's 'History of Philosophy.'"

From the Chronicle.

"It is a history of philosophy in the ordinary sense, written with extreme accuracy and clearness, and with wonderful power of condensation. Zeller's 'History of Greek Philosophy' is too masterly a book to contain much that is superfluous: still the earlier part of Schwegler's volume contains in substance nearly all that is important in Zeller, except the references and illustrations. . . . His translation abounds in vigour and liveliness, which is quite wanting in the very imperfect version of Mr. Seelye. Schwegler's text does not stand in much need of annotation. Still the remarks which Dr. Stirling has appended are useful in bringing Schwegler's results side by side with the conclusions of writers popular in England; and they may certainly claim the merit of thorough insight into the points at issue."

From the Oxford University Herald.

"The circumstances narrated, the facts reproduced, the incidents compiled, and the conclusions deduced, are suggestive of historical research and descriptive powers on the part of the writer of a high order. Dr. Stirling's translation and annotations are a valuable addition to the standard works of the classical

library, and our only desire in speaking cautiously of the work is that the talented translator may be induced to reproduce the rendering of 'The History of Philosophy' in a more elaborate form."

From the Aberdeen Free Press and Buchan News.

"This is a good translation of an admirable book. . . . Avoiding the lengthened criticisms in which Lewes frequently indulges, Schwegler is able to devote more space to the historical and expository part of the subject, and consequently, except in the case of the English schools, his delineation of the system of any philosopher is generally fuller and more minute, and his exposition more detailed than the corresponding one in Lewes. We might point to the account of the philosophy of Spinoza as a good example of the author's singularly lucid manner in portraying an important system."

From the Morning Journal.

"Its careful and intelligent perusal must prove of very great service to any one just entering upon the noblest of all studies. . . . This German Handbook deserves all the merit assumed for it by the translator, in respect of its clearness, fulness, and connectedness. . . . The annotations at the close of the volume by the translator are both elucidatory and controversial, and throw considerable light on the early schools of philosophy."

From the Saturday Review.

"Dr. Hutchison Stirling himself is neither a confused thinker nor an obscure writer. An essay which he has lately published on De Quincey and Coleridge shows an intelligence clear of all fog, and a power of direct and forcible exposition. . . . His account of the mode, half-conscious, half-unconscious, in which Coleridge lapsed into his appropriation of another's thoughts and words, is a really fine piece of pyschological tracery. So in the little volume which is now before us, Dr. Stirling has appended some fifty or sixty pages of annotations, which, taken by themselves, will be found very interesting and original reading."

From the British Quarterly Review.

"Enough is done to enable us to endorse Dr. Stirling's verdict, that Schwegler's is at once the fullest and the shortest, the

deepest and the easiest, the most trustworthy and the most elegant compendium that exists in either German or English."

From the Westminster Review.

"Schwegler's is the best possible 'Handbook of the History of Philosophy,' and there could not possibly be a better translator of it than Mr. Stirling: it is rarely, indeed, that a person of such qualifications will be good enough to translate."

From the British Controversialist.

"This translation is fluent, readable, and thoroughly English, although it retains the clasp and grasp of the original German. . . . The annotations as a whole form a body of powerful controversial *adversaria* to the positive school of speculative writers."

VII.

In Crown 8vo, Price 5s.

JERROLD, TENNYSON, AND MACAULAY,

WITH OTHER CRITICAL ESSAYS.

From the Edinburgh Courant.

"Dr. Hutchison Stirling has for some time past been known and recognised as a thoroughly matured and competent philosophical thinker and critic, but he has not hitherto come before the public as a contributor to general literature. In the volume before us, he therefore presents himself in a new light; and although it is true that once a metaphysician, always a metaphysician, and that whether in criticism of politics, or history, or poetry, the metaphysician, if true to himself, must criticise upon philosophical principles, and after a philosophical method, yet, in appearing as a popular essayist, he must exhibit other, and, if commoner, not less indispensable, qualities ere he can be said to have won his spurs in literature. The collection of Essays here gathered together and republished, shows that Dr. Stirling is possessed of many of these qualities. The writer who can read the *Secret* of Hegel, also evidently possesses the receptivity and sensitiveness to poetic gifts and graces which a critic

of poets and poetry requires. He is full of fervour, and appreciative of the most delicate traceries which we owe to the poet's imagination. . . . The admirers of Tennyson owe a debt of gratitude to Dr. Stirling for the finely discriminative and thoughtful criticism with which the Essay on the Poet-Laureate is replete. . . . The essayist shows himself capable of judging Macaulay's real capacities, which were certainly great, fairly and without prejudice; and we know not, amid the multitude of writings about the historian, where to find anything that can surpass this essay for genuine insight into the heart of Macaulay, and for appreciation of his eminent gifts. It is a fine specimen of philosophical criticism, that seizes the inner principles of the subject discussed, criticising from the heart outwards, as from a centre to the circumference, and not from the waistcoat inwards. . . . We recommend this volume heartily as a collection of most able essays, full of fine criticism, distinguished by genuine philosophical power, to all our readers."

From the Edinburgh Daily Review.

"The graceful and perspicuous writing, the refined poetical taste, the keen practical eye, the profoundly solemn reverence and simple faith which characterise these papers. . . . It would not be easy to choose between these two in point of mere interest. That on Macaulay is perhaps the more valuable, inasmuch as a fair estimation of Macaulay is rarer at present than a due meed of praise to Tennyson. . . . But this paper on Macaulay aspires to be much more than a mere stringing together neat sentences of just criticism. It tries—and the field, we fancy, is virgin soil—to take the man as he was, and to ask how he came to be such: to trace in him a development of the spirit which pervades history. . . . The Essay on Tennyson is in a different strain. The critic is not sunk—far from it; his comparisons of our Laureate with Wordsworth, Shelley, and Keats are keen-eyed and felicitous in the extreme; but the devoted admirer finds less room for his critical faculty to play. The style changes with the thought: it becomes more resonant, figurative, and solemn."

From the Perthshire Journal.

"This volume is a book for all with any literary culture or enthusiasm. Not one of mere superficial or external criticism,

but penetrating, subtle, incisive, it is pre-eminently a book of ideas, from which no one can rise without recognising that, while he has been wandering in the pleasure-paths of easy literature, he has at the same time had a *compagnon de voyage*, who has told him many profound truths, and who has left him with his intellect braced and sharpened. . . . The mind of the powerful, far-seeing, deeply-piercing critic is stamped on every page of the Essay on Macaulay. . . . The Essay on Tennyson is dictated by a spirit of intense admiration and love—not the less finely critical, however, for that. . . . Dr. Stirling's portraiture of Macaulay is wonderfully true; he almost startles us by the way in which he seems to see through him."

From the Scotsman.

"These essays are all written in a style so transparent, that we do not remember of a paragraph that seemed to demand a second reading for the sake of being understood, though many of them, for other reasons, did solicit more than one reading. The style is really a clear, forcible, often elegant, English style, and is generally the vehicle of a weighty meaning. Dr. Stirling has evidently tried to understand *thoroughly* what he was to criticise. Finding fault for its own sake, or for the sake of mere smartness, and the pleasure of saying a biting, scornful thing, lies far out of his way. Guided by a right, if rather stern, moral purpose, he has done his work, mastering it completely, even to details, and never pretending to knowledge which he has not done his utmost to attain, and has not attained in so far as severe industry, rare logical acuteness, and a ready, capacious memory for details, have rendered attainment possible. Without a very remarkable memory, he could not have dropped into their proper places such apt quotations, and cited regularly facts and principles so pertinent to the purposes of illustration, collation, and contradiction. He keeps, for the most part, a firm hold of principles—as it was to be expected a writer of his great philosophic powers and proclivities would do—but he certainly works in about them a sort of mosaic of nicely adjusted illustrative or ornamental details, which, to most reflective readers, will seem both curious and surprising. . . . The Essay on Tennyson is a criticism of the works of this greatest of living poets, conceived in a spirit of intense sympathy and warm appreciation;

and, to the best of our knowledge and belief, no estimate has yet appeared so exhaustive, so just, and at the same time so high, of the productions of Alfred Tennyson's genius."

From the Examiner.

"The first essay is a pleasing tribute to the memory of frank, generous, kindly Douglas Jerrold, than whom it would be difficult to find a man whose loss was more regretted by his friends of the literary guild. Dr. Stirling's estimate of Douglas Jerrold's writings is, we think, a correct one. . . . There is a logical accuracy and a clearness of diction in the style of Dr. Stirling which many of our essayists would do well to imitate."

VIII.

In Crown 8vo, Price 6s.

BURNS IN DRAMA.

TOGETHER WITH

SAVED LEAVES.

From the Liverpool Mercury.

"The dramatic sketch of Burns is a powerful piece of writing, thoroughly unique of its kind in the English language, and managed throughout with the highest literary skill. The Scotch especially, as introduced in the different scenes, is perfect."

From the Aberdeen Daily Free Press.

"A vein of broad humour runs through much of the dialogue, and the resources of the vernacular dialect are used to good purpose, while in his use of incident as well as of language, the author exhibits much skill in the production of picturesque effects. . . . This 'drama' certainly displays a variety of powers of a very high order on the part of its writer."

From the Liverpool Weekly Albion.

"The first and largest piece, which gives its name to the book, is a careful study of the character of Burns. . . . A note at the end sketches the principal traits of the man, with an insight which makes it well worth the attention of all the lovers of the poet."

From the Athenæum.

"It is a powerful study of character. . . . Some of these (Saved Leaves), like Ogrebabe, the Body-Snatcher, are very grim."

From the Galloway Gazette.

"Some of the productions are remarkable for their originality, thought, and gracefulness of expression. 'The Ballad of Merla,' 'Belshazzar's Feast,' 'Venetian Madeline,' 'The Sleeping Beauty,' all stamp the author as a talented and original writer."

From the Dumfries Courier.

"Poetic feeling is manifested everywhere. . . . The Welsh articles are interesting, the social articles reveal a keen eye and a manly tone, and the story of the dissecting-room is sensational enough to satisfy even a palled appetite."

From the British Quarterly Review.

"Mr. Stirling takes up the great Scotch poet, and unfolds to us the phases of his character through the medium of a play. . . . Powerfully and graphically painted."

From the Dundee Advertiser.

"This racy and refreshing little volume. . . . containing some exquisite papers."

From the Northern Ensign.

"Here the man lives before us; the life becomes articulate. This sketch presents by much the best idea of the personality of Burns with which we are acquainted, because its dramatic form gives at once what is most deep and versatile in the nature of the man, and the true aroma and atmosphere of his outward life. The character of Burns himself, his joviality and fits of

melancholy, his heart-burnings and haughty indifference, his tenderness and devil-may-care, shine out before us along with his associates of twenty years, his patrons and cronies, his butts and bores, Ainslie and Rankine, Jean and Luath, the impressive Hornbook, the insufferable Blair. Nor could anything more exactly express the nature of the man on its serious side than the words put into his mouth,—'I dare sin, but I dare not lie;' or on the other side the words (when his wife has sung 'My Nannie, O'), 'Ay, ye may weel clap your hands, Ainslie. A finer singer—*or a finer song*—weel, we'll no praise ourels.' Trust one canny Scotchman to find out in another that affectation of being vain, which is three parts affectation and one part real vanity. The author's faculty is unique for insinuating himself into these half-conscious moods, and turning them inside out; all of which is much helped, and often suggested, by his strong sense of humour. . . . In 'Sleeping Beauty' we have another phase of the same fact, the Spirit of Grace, like the moonlight in Turner's 'Dudley,' struggling with the despotism of trade, and the influence of modern competition, cant, and rascality. The moral purpose of the volume is at its highest in this noble prose poem. But we have a quaint variety of it in the article on ladies' full dress, which is a delightful union of dexterous argument with sound sense. In point of general, literary merit, the book is superior to anything Dr. Stirling has published. The most perfect in form and most original of the poetical pieces are the 'Universal Strike' and 'I am That I am,' which we take to be the most luminous piece of metaphysical poetry in existence. 'Venetian Madeline' and Belshazzar's Feast' are rich in Venetian colour and Oriental sumptuousness. But all have a poetical individuality, and an imaginative grasp which enables us to indorse the opinion expressed of the author's first prose work, that his powers in this direction were sufficient 'to stock an aviary of popular poets.'"

Post Card from W. T. Harris, LL.D., Editor of *The Western*, of the *Journal of Speculative Philosophy*, Superintendent of Public Schools, etc., St. Louis.

"*Oct.* 29, 1878.—I read through Burns in Drama, night before last, beginning it at 9 P.M., and finishing it at 4 A.M., reading slowly and making references to the *Cyclopædia* and

to my copy of Burns as I went along. I was *intensely* interested in it. It beats any biography, or even Carlyle's famous Essay on Burns. I am writing a notice of the book to-night."

From the Rev. Joseph Taylor Goodsir.

"I quite agree with W. T. H. in his conclusions. Having read Carlyle's essay again on purpose, I have no hesitation in saying that there is all the difference between his representation and yours that there is between a plain daguerrotype and a first-rate stereoscopic view. The details, too, are admirable; *ex gr.*, the duel between the 'High Kirk Orator and the Poet.'"

From Dr. William Veitch, Author of the Clarendon Press Treatise on the Greek Verb.

"I rejoice that there is 'a Scot abroad,' καὶ ξυνετὸς καὶ σώφρων. It would be humane and patriotic to subscribe a trifle to send a few of our little big men to the New Country to relume 'the sacred fire.'"

From the Journal of Speculative Philosophy.

"This small volume, from the distinguished author of 'The Secret of Hegel,' will prove of unusual interest to those who have read his philosophical writings. His intense, fiery style, his profound absorption in his theme, his amazing gifts at description of subtle psychological processes, rendered his book on Hegel what the Germans call an 'epoch-making' one. He seizes the reader's attention from the start, and holds it by his power to throw the interest of personal adventure into his portrayal of the struggles and disappointments incident to discovering the thought of a great philosopher. . . . Dr. Stirling is certainly the most successful of philosophers in his literary presentation of the steps of philosophic experience. This has been realised by a multitude of old and of young who have read his books. These persons will welcome the 'Saved Leaves' as a desired completion to the biography of a true man, who has laboured, with no mean success, to become MAN—the generic type, to realise his race. . . . Most of the scenes of the first three acts would make a lively impression on the stage. The fourth and fifth acts follow the life of Burns into richer, nobler

developments, but which cannot be presented with adequate stage effects because of their internality. . . . The characters are portrayed in a few masterly strokes, showing the very essence of their humanity. . . . No essay on Burns, or biography of him, gives such vivid pictures of the man as does this 'drama.'"

From Patrick Proctor Alexander, Esq., M.A., author of "Moral Causation," "Mill and Carlyle," "Life of Alexander Smith," &c.

"As to the bleaching-green scene, I have no doubt it was pretty well just that that did take place."

From J. Scot Henderson, Esq., of "Globe" and "World," &c., &c.

"I do not think, in all the innumerable contributions to Burns literature, I ever met anything that is at once so truthfully characteristic, so pre-Raphaelitically realistic, so to speak, and yet so discriminative of the best ideal tendencies of the man and poet both. You have lived yourself into his central individuality—if I may say so. . . . This notice is to the point, and expresses what I felt most strongly about the Burns —you have restored to us the very personality of the man."

From Mr. Cupples.

"'Burns in Drama' is, beyond question and *opinion*, masterly —a first-rate piece of work. It is thorough poetical representation—sets the man there—enters into him and all his surroundings. Wilson, to my mind, is better than Carlyle on the subject. But you do, I think, in far less space and few words, what he does with much oratory—and, besides that, you give what no one else has given, to *me* at all events; you reproduce and represent, and also give touches that are absolutely clairvoyant. In Burns's case these have a peculiar value, for to understand and appreciate him, personality is *first*, indispensable, essential. 'Sleeping Beauty' is exquisitely well done; it reminds me of Shelley when he is at his best. . . . The descriptive touches

throughout the volume are often exquisite, always indicative of unusually accurate observation as regards Nature, still more so where any human concern is involved, *e.g.*, '*there* are men working on a hull; you see the hammer fall—soundless—but with an echo,' as 'the steamer' passes with this one hearer amidst a babbling crowd of *Glasgow Down-the-water*. The pictures of Wales are uncommonly full of such graphic touches. . . . 'Ogrebabe' is a very powerful sketch, but not pleasant to read of a night. The allegorical, or rather the symbolical and hieroglyphic force of meaning in 'Aihai,' and in the various poems, is of a quality that places them far above mere off-hand estimate by journalists."

From the late Douglas Jerrold.

"I was very much struck with the peculiar freshness and vigour of your first paper (the Novelist, etc.); it had thought and sinew in it."

From January Searle, author of "Life of Ebenezer Elliot," &c., &c.

"It is a graceless office, however, to find fault, especially where there is so much to admire. I think the reader will agree with me that 'Merla' is full of nature and beauty, and that it is woven in the woof of genius and poetry. It contains sea-pictures and sea-voices, such as one does not often find in literature."

From the late George Gilfillan.

"I am reading your 'Leaves' with continued interest: 'Ariel' is a piece of genuine poetic beauty."

EDINBURGH: OLIVER AND BOYD.

EXTRACTS FROM GENERAL TESTIMONIALS, &c.

From Professor Zeller, of Berlin.

"All that I have read of the philosophical writings of Mr. James Hutchison Stirling has convinced me that their author is distinguished not only by a comprehensive and thorough knowledge of ancient and modern philosophy, but also by an accurate understanding and appreciation of its import and history, as well as by a clear, animated, and universally intelligible style in the statement of it."

From Professor Erdmann, of Halle.

"That his knowledge of philosophy as a whole is not restricted to Kant and Hegel, has been demonstrated by him in the annotations with which he has adorned his translation of Schwegler's 'Handbook' . . . Every word that seems not to breathe the greatest esteem for Stirling is wrongly read, and must be replaced by another at choice."

From the late Professor Ueberweg, of Königsberg.

"Through my colleague, Rosenkranz, who bears you in mind with great recognition, I became acquainted with the first edition of your translation of the introduction—generally acknowledged to be excellent in its kind—by which Schwegler, too early lost to us by a premature death, rendered an inestimable service to the study of the history of philosophy. The speedy demand for a second edition testifies to the approbation which this useful book finds in your country also. The completion of the notes in your second edition enhances the interest of the work. . . . It affords me, too, great satisfaction to see a system so complete in its kind as is the system of Hegel, made by you more accessible to the English mind."

From Professor Rosenkranz, of Königsberg.

"James Hutchison Stirling, LL.D., marks an important turning-point in the history of English philosophy. Provided with that most solid knowledge which only the study of positive science can supply, he has made himself master, at the same time, and in a rare degree, of all the speculative problems of the deepest thinkers. It would be exceedingly one-sided to call him an Hegelian, for the simple reason that he has, with less prejudice, more clearly and more deeply comprehended, and more luminously expounded, the worth and the warrant of the Hegelian philosophy than has hitherto been accomplished in England. Stirling nowhere belies the true English spirit that is directed to reality and fact. In his celebrated work, 'The Secret of Hegel,' he makes it prominent in this respect, therefore, that, not the abstract, but the 'concrete universal' constitutes the principle of his speculation. And in this, too, is he equally national, that with free mastery of the object, he can dispense with the scholastic form, which, at the same time, he perfectly well knows how to handle, and can illustrate the boldest thoughts with brilliancy and humour. His vigorous polemic against Hamilton is a remarkable example of the higher criticism, which, with the advantage of his universal standpoint, he is enabled to exercise. Instead of translating Schwegler's 'History of Philosophy,' its excellence of execution notwithstanding, he might have done as well, and perhaps still better, had he given us his own composition; as is evidenced by the ample critical annotations which he has added to this useful work."

From Ralph Waldo Emerson, Esq.

"I have never seen any modern British book (refers to 'Secret of Hegel') which appears to me to show such competence to analyse the most abstruse problems of the science, and, much more, such singular vigour and breadth of view in treating the matter in relation to literature and humanity. It exhibits a general power of dealing with the subject, which, I

think, must compel the attention of readers in proportion to their strength and subtlety. One of the high merits of the book is its healthy moral perceptions. . . . If there can be any question when such an incumbent can be found, I shall be glad to believe that Intellectual and Moral Science is richer in masters than I have had opportunity to know. . . . . Schwegler came at last. I found on trial that I too could read it, and with growing appetite. I could at least appreciate well enough the insight and sovereignty of the annotations, and the consummate address with which the contemporary critics and contestants are disposed of with perfect comity, yet with effect. . . . The essays I have carefully read. The analysis of Macaulay is excellent. The 'Coleridge' painful, though, I fear, irrefutable. . . . The 'Tennyson' is a magnificent statue—the first adequate work of its kind—his real traits and superiorities rightly shown. . . . I never lose the hope that you will come to us at no distant day, and be our king in philosophy."

From Thomas Carlyle, Esq.

"To whatever I have said of you already, therefore, I now volunteer to add, that I think you not only the one man in Britain capable of bringing Metaphysical Philosophy, in the ultimate, German or European, and highest actual form of it, distinctly home to the understanding of British men who wish to understand it, but that I notice in you further, on the moral side, a sound strength of intellectual discernment, a noble valour and reverence of mind, which seems to me to mark you out as the man capable of doing us the highest service in ethical science too; that of restoring, or of decisively beginning to restore, the Doctrine of Morals to what I must ever reckon its one true and everlasting basis (namely, the divine or *supra*-sensual one), and thus of victoriously reconciling and rendering identical the latest dictates of modern science with the earliest dawnings of wisdom among the race of men. This is truly my opinion."

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Sterling, James H.
AUTHOR
Text-book to Kant
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